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ABSTRACT

The demonstration project involving the Cooperative School-Rehabilitation Centers (CSRC) for trainable mentally handicapped adolescents is described in areas of background, local planning, the planning grant, and beginning activities. Administrative concerns of staffing, program focus, responsibility structure, and negotiations for expansion are noted. The students' characteristics are presented, and brief descriptions of program areas including academics, arts and crafts, home economics, independent living, job training, music, physical education, and social perceptual training are provided. Followup data examines adjustments in employment and community integration. Also described are the role of the case manager, program innovations, program support activities, steps to employment, and the implications for the future of the Cooperative School-Rehabilitation Centers. (RD)

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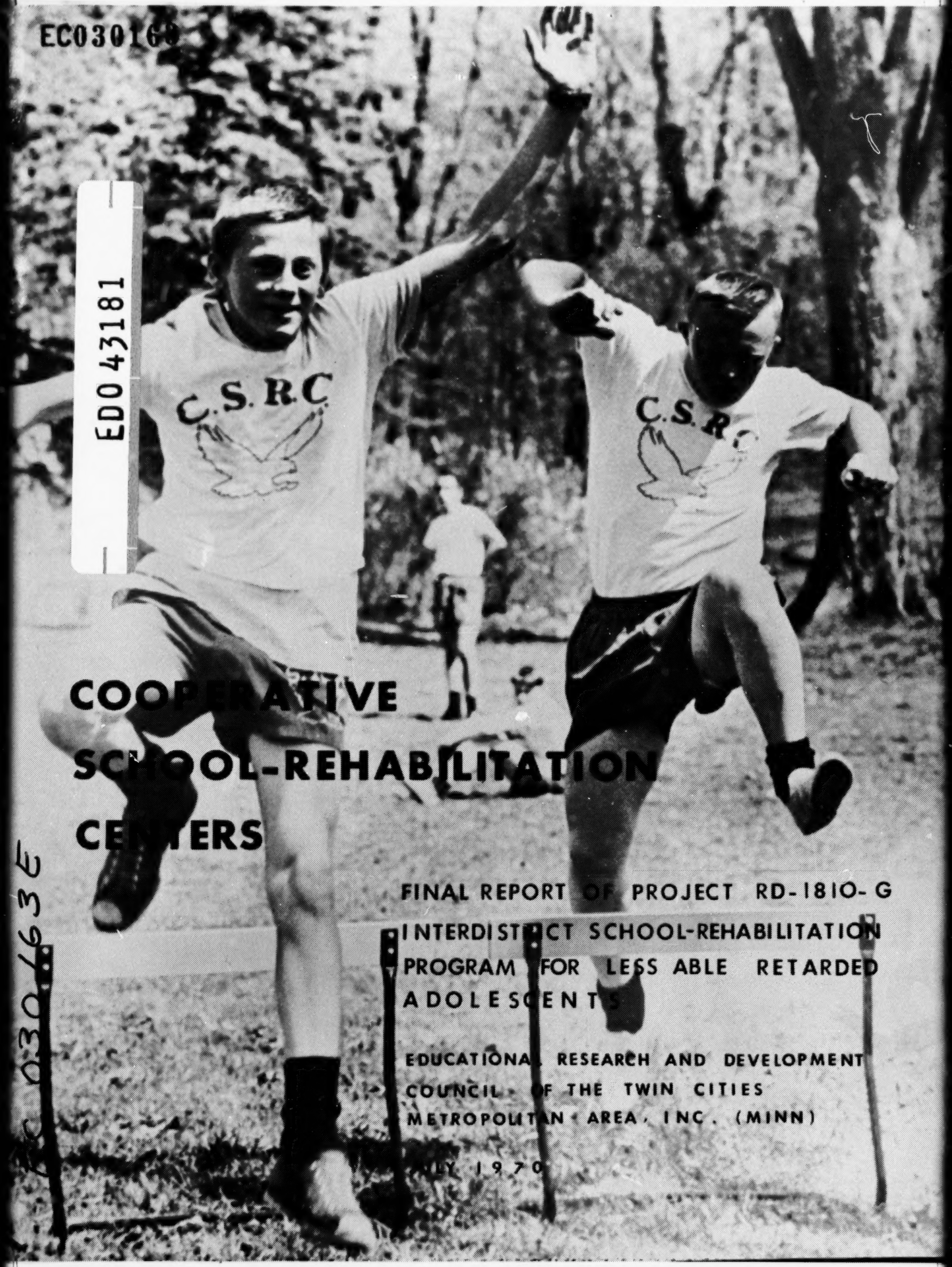

COOPERATIVE SCHOOL-REHABILITATION CENTERS

FINAL REPORT OF PROJECT RD-1810-G

INTERDISTRICT SCHOOL-REHABILITATION PROGRAM FOR LESS ABLE RETARDED ADOLESCENTS

EDUCATIONAL RESEARCH AND DEVELOPMENT COUNCIL OF THE TWIN CITIES METROPOLITAN AREA, INC. (MINN)

JULY 1970

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COOPERATIVE SCHOOL-REHABILITATION CENTERS

Final Report of Project RD-1810, "Inter-District School-Rehabilitation Program for Less Able Retarded Adolescents."

Grant period: July 1, 1965 to June 30, 1970
Report date: September, 1970

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Significant Findings

Project RD-1810-G, Interdistrict School-Rehabilitation Program for Less Able Retarded Adolescents

The significant findings of CSRC are those of a demonstration project. They relate to matters of administration, inter-district operations, identity and needs of students, program design, and rehabilitation goals.

A more complete coverage of these points will be found in Chapter 9 of this Final Report.

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"Less able" retarded adolescents, operationally defined as those too handicapped to be adequately served in their home school districts, make up a coherent group for whom an effective school-rehabilitation program can be devised.

When a service is provided in fact, the people who need it begin to appear (the "woodwork effect"); more of them appear than would be predicted by a census of need carried out in the abstract.

A perceived service need, a fair degree of mutual trust among the service providers, and integration into the whole local spectrum of service can bring about a successful program even if an organizational structure is theoretically inadequate.

The provision of a service gives focus and vitality to an area-wide or inter-district organization.

If the students being served are unusual enough to require a special facility, the economical service radius in an urban area is at least 20 and perhaps 30 miles.

An inter-district public school-rehabilitation program for "less able" retarded adolescents, capable of offering a diversified program, probably requires a general population base of 500,000 or more.

A special education facility, as a part of the public educational system, may receive rather than duplicate many items of administrative overhead; pupil transportation and the management of state aids are examples.

A public school special education facility, provided that it is large enough, can offer a well-rounded and wide-ranging set of program options to the individual student.

A deliberately open-ended set of job descriptions, with staff selected for diversity and with minimum stress upon paper credentials, can lead to differential staffing and an effective program.

Program development forced by a no-reject intake policy, and program design which follows as much as dictates staff selection, can lead to the provision of effective service.

Case management, with one staff member bearing responsibility for mobilizing all resources on behalf of the student while having no

(over)

administrative authority, is a viable alternative to the more diffuse "team approach."

A public school-rehabilitation program can and must address itself to a broad range of goals for its students, and is well advised to value the whole range.

A facility that tries to value equally all outcomes which are optimum for the individual client, and that does not select clients on the basis of their outcome potential, may still show a creditable record of client achievement.

Broad community support, including much support that is material, can be generated by a public school unit that remains administratively a public school.

Community support seems to require that the staff of a facility be equally involved in supporting related community action; service on community boards and committees builds bridges both ways.

The creation of a service at the adolescent age level seems to foster the development of more feeder services at lower age levels, and more outcome services at higher age levels.

The "seed money" concept of R&D grants is vindicated by the establishment of CSRC as a public school service which is now accepted as indispensable to the local spectrum of services and has full, routine local funding.

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Grantee: Educational Research and Development
Council of the Twin Cities
Metropolitan Area, Inc.

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The CSRC service area: over 50 public school districts, 1.8 million total population, 413,000 school-age children; 60 miles across, seven counties, two major cities. Two Centers now serve the area.

"The Cooperative School-Rehabilitation Centers (CSRC) are public school special education facilities. They were initiated and jointly operated as a single organization by some 47 public school districts, the Educational Research and Development Council of the Twin Cities Metropolitan Area, Inc.

Development of RD-1810-G Chapter 1

"Begun in 1965 with the help of a project grant of Federal rehabilitation funds, the CSRCs have shifted to local funding. The 1970-71 budget has been committed within District No. 287, a special school district authorized by the Minnesota legislature to operate vocational-technical and special education services on an inter-district basis.

"Students served are the less able mentally retarded adolescents, with an average IQ just under 50, who cannot be adequately educated in the schools of their home school districts. Each district makes its own decision as to whom to refer to the CSRCs and pays the tuition. Students are bussed to the Centers from their homes each day.

"The organization operates two Centers; the West Center on the grounds of the Glen Lake State Sanatorium and the East Center located in St. Paul and serving the eastern metropolitan area.

"The program of the Centers is a high school equivalent, adapted to the special needs of the retarded and with a strong vocational emphasis. The program's objective is to maximize each student's opportunity for reaching competitive employment or for attaining the highest level of self sufficiency of which he is capable. Classrooms, work laboratories, and specialized learning programs are provided."

The foregoing is quoted from a fact sheet distributed by the project described in this report. The fact sheet then goes on to outline some of the statistics of the project.

BACKGROUND

CSRC is no exception to the rule that effective services tend to have deep roots in the history of their community. The Twin City metropolitan area has a long record of being one that shows concern for disabled children and one that assumes leadership in meeting their rehabilitation needs. The public schools of Minneapolis and St. Paul have included special education services in their programs since early in the twentieth century. The suburban school districts surrounding the urban core have made provision for the handicapped in their rapidly developing school programs in spite of their population pressure problems. The area has been a national leader in physical medicine and vocational rehabilitation services.

The Minneapolis and St. Paul school districts led the way in coordination of special education and vocational rehabilitation services through contractual agreements which had been set up between the State Division of Vocational Rehab-

ilitation and the city school systems in the early 1930s. Through these contracts, DVR offices were established within the administrative offices of the two school systems.

In 1960 the Vocational Rehabilitation Administration awarded to the Minneapolis school system a Research and Demonstration Grant (RD-681) for "a study and demonstration of means of realizing vocational rehabilitation goals through special occupational training services to high school aged educable retarded youth." That project extended over the four-year period ending in August 1964. During this time techniques for evaluation and training of the retarded were explored, evaluated, tested, and cross validated. The final report of RD-681 is "Retarded Youth: Their School Rehabilitation Needs."

LOCAL PLANNING

Meanwhile, as part of the same ground swell of interest which supported RD-681, other special educators in the Twin Cities area had been exploring means for

Dr. Van D. Mueller has been Executive Director of the Educational Research and Development Council during most of the time that the Council has carried responsibility for the Cooperative School-Rehabilitation Centers. Though he continues as Financial Officer of Project RD-1810, Dr. Mueller resigned as Director of the Council during the past year in order to devote full time to teaching, research, and consultation. This interview was conducted several weeks after he relinquished his Council position.

Q: The Educational Research and Development Council is an organism that wasn't designed to be able to operate programs. How were you able to carry this out? How were you able to make ERDC function in this way?

MUELLER: Just good people. Then too, I think that at that point in time I had the confidence of the ERDC Superintendents. There maybe was just a fair amount of luck involved in the mixture. I think that the other part of this is that we were getting at an area of service in which the schools were just so tight that they were likely to be a little more tolerant than in other areas. They were just in big trouble. We were going to take a monkey off their backs. I think back to the original days when the districts had less than a complete commitment to spend a lot of money on a student of this kind. We spent a fair amount of time selling the harder people that this was reasonable, that this kind of investment in a student was going to pay off.

Q: Was it harder to justify?

MUELLER: I don't think that has been a problem. After those early days, I think that people assumed it to be another one of the things that is happening in our society. Differential costs for problems that are differential in nature are no longer a question.

improving their services to all of the mentally retarded. The Minneapolis Area

School Study Council, an ad hoc organization of many of the school districts, established a Commission on the Exceptional Child. The minutes of the Commission's meetings in early 1962 carry a report on the survey of care and training of trainable mentally retarded in Minnesota. Later that year, on the basis of this and other evidence of need, the minutes state, "One of the problems identified at the meeting was the possibility of setting up a cooperative pre-vocational program for trainable adolescents. Most of the schools represented felt that they were not satisfactorily solving the problem of the lower educable and trainable children as they outgrew their special education programs as presently set up. It was decided to continue this discussion at the next meeting." At that time a committee was appointed to study the need for a program and its financing, supervising, and administering. Within three months, in February of 1963, the committee submitted a proposal for a demonstration project.

The Minneapolis Area School Study Council was reorganized later in 1963 into the Educational Research and Development Council of the Twin Cities Metropolitan Area, Inc. (ERDC) This reorganization was in response to the evident interest extending over the entire 7-county area so that the reference to the Minneapolis area alone in the title would have been inadequate. The reorganization established the Council on a broader and more officially committed base. The group within the Commission on the Exceptional Child, who had been developing plans for a demonstration project of cooperative pre-vocational programming for trainable adolescents, was reaffirmed within the structure of the ERDC and continued their work.

The project proposal as first presented to the ERDC called for the formation of three classes for children between the ages of 12 and 16. The IQ range at that time was projected to be from 30 to 60. It was thought that the 15 year olds would probably spend one-half day in the classroom program and the other half in a community sheltered workshop, depending upon their readiness for such a program. The committee report presumed that the school districts would act only in an advisory capacity after the child reached age 16, at which time he would transfer to the responsibility of the workshop situation. The goals of the program would be to teach self care and safety habits, to develop social language and leisure time skills, and to train pupils in simple occupational skills at perhaps the sheltered employment level. Though fundamental changes were made in the proposal, as it was given further consideration, this early proposition did lead to a commitment on the part of the school districts in the metropolitan area. The Minneapolis Area School Study Council, and later the ERDC, went on record as accepting the principle of an inter-district service unit to roughly this kind of adolescent. Negotiations were formally opened with the State Department of Education to enable more specific planning.

An updated proposal for the demonstration project was brought before the ERDC in March of 1964. A significant shift in the definition of who should be served was made at that time. "The purpose of this presentation is to propose a demonstration project by the Educational Research and Development Council of a program for retarded children who do not fit into special class situations now in existence or who need training beyond what is now available." This change in description enabled the project to focus specifically upon a group of students for whom there was a serious service gap in the community. Their presence in that service gap was to define the people in need of service rather than any *a priori* description of the

population to be served. "In this demonstration project it would be necessary to cooperate between member districts and community agencies in an effort to develop a long-range plan for these individuals. Present thinking calls for the formation of several centers for retarded children between the ages of 14 and 18. The nature of this program may necessitate extending the age limit somewhat."

The report also recommended the establishment of an advisory board, operating under the supervision of the Board of Directors of ERDC, for the general administration

Q: In a sense it is easier to do things unilaterally on a host district basis than to have the service area participate in government.

MUELLER: That's right. All the time that Dick and you and some other people spent with the CSRC Advisory Board---if you counted the hours working with them it would be a fantastic number. True, the Advisory Board has been more than just a steering committee, but it's not been a Board of Directors. That was another point when we were setting up the bylaws. You should have heard the hairy sessions. Basically, the Board functions almost like a governing board except that it has no power to implement. But in my judgment, there is more than just nominal involvement.

Q: There has really been a feeling that they were carrying responsibility, but without being so tight that it would be a catastrophe if their advice were not followed.

MUELLER: It's still advisory, but it is more than a typical advisory committee. I think that there have been people who put in time, first of all, more than they would on a typical advisory committee. I am glad that the Advisory Board will be continued under the new organization, and expanded. There are Advisory Board members from a lot of the districts that make up the Vocational Joint Board. I think there is a healthy overlap there. I think that they'll make sure that the whole flavor of this group more or less continues.

of the demonstration project. Membership on the Advisory Board would broadly represent the public schools and other related agencies. As events subsequently developed, this board was instituted and has served as one of the defining characteristics of this inter-district project. Employment of a director and the institution of "hard" planning was recommended.

PLANNING GRANT

Mr. Charles Hagen was immediately engaged as a coordinator. Donald Davis, Executive Secretary of the ERDC, was designated as Project Director on a one-fifth time basis. The possibility of local private foundation monies was first explored. Application was then made to the Vocational Rehabilitation Administration (now Rehabilitation Services Administration) for a $10,550 planning grant. Pending

> *Our attention centered mainly on programs which could appropriately be developed at the Children's Building, but brief study was given to physical aspects of the facility. The building was constructed in 1921 of brick, tile, reinforced concrete beams and columns and wood rafters over a concrete roof slab. It is classified as fire resistive. There are three floors and a full basement totaling 21,096 square feet of space. It is connected by underground tunnel with the nurses' residence and the main hospital buildings; the tunnel may be used conveniently to provide food service from the hospital's main kitchen.*
>
> *In general, the building is attractive, well-lighted, and well-heated. The grounds are spacious and beautiful. Considerable work is needed to refinish and paint much of the interior wall surface; window units need to be replaced; some plumbing and electrical work is needed. A very rough estimate of the cost to put the building in shape for occupancy was made by one maintenance worker at $50,000.00.*
>
> *A number of potential classrooms are included in the building, so that a school program could be developed. It happens that there are classroom-type spaces available in other buildings at the Sanatorium, making an extensive educational program a possibility.*
>
> -from a June, 1964 report to Minnesota's Governor made by Maynard Reynolds, Chairman of the Statutory Advisory Board on Handicapped, Gifted and Exceptional Children referring to possible programs at the Glen Lake State Sanatorium.

action on this application, a survey was undertaken among the member school districts seeking to identify retarded adolescents in need of service to gather some information on their need characteristics.

The planning grant, VRA Project RD-1635-G-64, "Study of the Feasibility of an Inter-district Program for Trainable Retarded Adolescents," was approved June 3, 1964. The work already done on developing information was incorporated into the activities

of the planning project. Aspects of the study to be undertaken by the planning project included: identification and incidence study, population characteristics study, review of the literature, survey of present status of service, program patterns study, study of laws and regulations, and pilot program design study. This last aspect has as its purpose to prepare a proposal for a research and demonstration pilot project, to demonstrate and evaluate an appropriate pattern of service to trainable and other seriously handicapped retarded persons. It was this demonstration program, as initially developed by the planning grant RD-1635, that became the Cooperative School-Rehabilitation Centers, which are the subjects of this present final report.

Planning quickly opened several parallel channels of activity. Data had to be gathered and the literature reviewed. A set of philosophy and principle had to be formulated and adopted by the participating districts. Looking forward to the demonstration which became RD-1810, a program had to be devised and arrangements made for its intake, staffing, and housing.

There was consensus that the demonstration program for which planning was undertaken should be an innovation and would necessarily depart considerably from the existing means and structures of service. The program should involve a centrally located inter-district service center. The optimum level of rehabilitation for its students should be the major objective, and the services should be individualized, comprehensive, and goal oriented. A variety of professional skills were anticipated to be needed. Each level of government and each type of organization would perform and finance the function most rational to its structure and responsibility. Provision would have to be made for the phasing in of the project, as it would not be possible to begin on a full scale. If the demonstration proved to be valid, it should secure the endorsement of the schools and of the vocational rehabilitation agency as a regular part of their program.

The demonstration program would have to be housed. The vision of the planning groups had expanded beyond the initial idea that space might be secured for an inter-district trainable classroom. State as well as local agencies joined in the search for a suitable facility. The Glen Lake State Sanatorium, located some 10 miles southwest of the geographic center of the Twin Cities metropolitan area and on the fringe of the urban-suburban population distribution, was suggested. Other plans had progressed sufficiently by August of 1964 to permit a formal approach to the State Department of Public Welfare. As a result of the cooperation of that agency, the State of Minnesota agreed to provide a building of 21,000 square feet including utilities and maintenance as a contribution to the demonstration project. The State Department of Welfare also agreed to provide funds for the renovation of the building. From this auspicious beginning, the hospitality of the Glen Lake Sanatorium and of its Superintendent, Melvin Dray, has been an outstanding contributor to the success of CSRC.

The building scheduled for use by the CSRC required extensive renovation and could not be occupied when school opened in the fall of 1965. Another building, smaller but not in need of such extensive repair, was donated to the use of the project by the Sanatorium. In this smaller building, in the fall of 1965, the first 15 stu-

dents were enrolled. Work went forward on the main project building, and it became available during the course of the 1965-66 school year. A third building, formerly the residence of the Sanatorium Superintendent, was donated to the use of the project for three years and served as a real setting for training in home living skills.

BEGINNING OF PROJECT RD-1810-G

Meanwhile, the planning activity under RD-1635 had resulted in a proposal for a demonstration grant. This proposal was submitted to the Vocational Rehabilitation Administration and was approved as RD-1810-G, "Inter-district School Rehabilitation Program for Less Able Retarded Adolescents." The grant period was approved for July 1, 1965 through June 30, 1970.

The project provided for the initial establishment of a center to serve both as a demonstration unit and as a focus for program development and evaluation. The specific aims of the project included:

1. to develop and demonstrate appropriate curriculum through a training and placement program
2. to develop and demonstrate case manager services
3. to conduct evaluative research and follow-up studies to determine the contributions of these to the lives of the students
   a. to determine factors related to employment
   b. to compare various vocational outcomes
4. to carry out a study of the metropolitan area retarded population in need of such services
   a. to determine characteristics of the population-in-need
   b. to develop specific plans for meeting these needs
5. to promote inter-school-district and inter-agency services
   a. by establishing and promoting satellite centers and coordinated programs, strategically located, to extend the capacity of the program to serve all retarded who require these services
   b. by serving as a referral and consultation source for member school districts, community agencies and parents.

As had been recommended, an Advisory Board was established to relate the work of the project to the needs of the community. The initial board was made up of representatives of the member schools, the University of Minnesota, the Minnesota Division of Vocational Rehabilitation and Special Education, and the Opportunity Workshop of Richfield. Advisory Board members have included: Richard Kauffman (Richfield Schools, Chairman of Board), Frank Brendemuehl and Loren Benson (Hopkins Schools), Jean Goins (North St. Paul-Maplewood Schools), Irene Herk and Wayne Erickson (State Special Education), Bjorn Karlson, James Turnure, and Robert Bruininks (University of Minnesota), Gordon Krantz, James Gavenda, and Keith Kromer (Minneapolis Schools), Vernon Schultz (St. Paul Schools), Edmund Schoppert, Eugene Stelman, and Marvin Spears (Division of Vocational Rehabilitation), Ellsworth Stenswick (Bloomington Schools), James Tormoen (Fridley Schools), Gary Alberg (South St. Paul Schools), Ross Johnson (Spring Lake Park Schools), George Prazich (White Bear Lake Schools), Alice Tuseth (Osseo Schools), and Mervin Healy and Richard Ugland (Opportunity Workshop, Inc.). This Advisory Board, with many of the members carrying over from year to year, has met regularly during the life of the project and has been intimate-

ly, directly involved in guiding its operation.

Richard Henze, who had directed the School Rehabilitation Program in the Minneapolis Public Schools, was engaged to direct Project RD-1810. He and one instructor, neither of whom had desks or office space, constituted the initial staff when the project began in July of 1965.

It was necessary for the Project Director and the Advisory Board to review the originally proposed staffing pattern and to make some modifications in job descriptions. These changes reflected more thorough appraisal of the needs for clear responsibilities and lines of communication and supervision in the day-to-day functioning of the project. On the other hand, the need was seen to continue some built-in flexibility in staffing with possibilities for future changes in response to developments and needs of the project. This flexibility of staffing, with the consequent open-endedness of job description, has been a hallmark of the project.

CASE FLOW

By the end of the first month's operation in the fall of 1965 the project enrolled 16 students. This number had expanded to 51 by mid-year.

Information gathered during the planning activities on the population who might need service had piloted the referral and the intake methods. Each referred student was assigned to a case manager (see Chapter 5 of this report) who obtained the information needed for initial student programming. An application to the State Division of Vocational Rehabilitation was also obtained during this time, and all students became referred clients of DVR. Arrangements were made through that agency for medical examination. The purpose of DVR registration was to facilitate the availability of services from that agency as they might be needed, and all project file information was made available to the DVR counselor. This arrangement of joint responsibility between the Center and DVR has continued throughout the project. There is some consideration at the time of this report of postponing the DVR registration of the younger students until they approach age 16.

Enrollment in the Centers has continued to rise fairly steadily during the 5 years of the project. During its 5th year the project enrolled approximately 225 students in its two Centers. One-hundred sixty-five students had egressed from the program by the summer of 1970.

The characteristics of the students and their outcomes after egression are described in Chapters 2 and 4 of this report.

PROGRAM

The program of the Cooperative School-Rehabilitation Centers evolved in its basic outline at the beginning of the project. The program is characterized by diversity in contrast to the single setting which might be available in a self-contained

classroom. It has a strong vocational emphasis.

During its first year of operation the Center program included two academic-related classrooms, a mechanical-manipulative shop, a home economics-related area, a physical activity area, and a music area. They have been referred to as areas because of the fluidity of their content and the project's desire to avoid a circumscribed, rigid approach. The aim has been to develop programs to fit the students rather than to fit students into a program. Staff freedom to experiment and to try ideas, even those with very guarded prospect for success, has been encouraged. To a marked extent the particular skills and talents and interest of the staff have shaped the directions taken by the program areas.

The nature of the CSRC program areas during the final year of the project will be found detailed in Chapter 3 of this report.

STAFFING

Following the realignment of job descriptions which took place during the early months of the project, the initial two-man staff grew to a total of 16 by the middle of the first year. The Director was responsible for overall administration and

Q: We took the monkey off their backs in that one sense as you said, but we put another monkey on their backs in that the districts had not had to deal with this kind of problem before. Now that there is a way to deal with it and there is pressure on the districts to take care of problems which they didn't have to before, has there been any flap?

MUELLER: Yes, there was a large discussion on that. The fact that we were offering a program like this on the secondary level when some of the districts didn't have any elementary trainable classes, how do we interface with that? It put a lot of pressure on them to put in trainable programs at the elementary level and to extend the elementary programs to age 14 or 15. This was not done without some strain. Now the vast majority of districts in this area have some kind of program for the trainable even though trainable classes are still optional under Minnesota law. I don't know whether you can attribute this to a causal relationship, but I think that there is more than just a coincidence. In part, this program put a greater pressure on the districts to do things.

Q: So it's nearly impossible to assess the effect which a single program has on the entire service area.

coordination. An Assistant Director was responsible for case management services and research. Another Assistant Director was charged with responsibility for the instructional and training program and for job placement services. Five instructors

carried out the training of students in their assigned program areas, and three case managers coordinated the program of individual students. A social worker conducted case work with selected students and parents. Three vocational aide positions, not requiring college or professional training, were established for the provision of specific job training and related activities. Supporting staff included a secretary, a typist, and a custodian who also spent part of his time supervising students in building maintenance training. A physician and a psychologist provided consultation, and the services of a beautician and a draper were engaged on a part-time basis.

The position of social worker was terminated at the end of the first year. This position appeared to be in conflict with the staffing pattern which the project was attempting to demonstrate and evaluate, namely "case management" in contrast to the traditional "professional team" approach.

Staff expansion kept pace with the expanding demand for CSRC service. The vocational aide position was found to be flexible and productive. Differential staffing was further extended when junior colleges began to prepare child development technicians at the two-year level. Some aides and technicians were found capable of conducting program areas in such relative independence as to warrant designation as associate teachers. With occasional difficulty approval of this differential staffing has been successfully negotiated with the State Department of Education.

Additionally, college students have served as program aides. Beloit and Antioch Colleges require their students to spend at least one semester in employment before graduation. The CSRCs have secured the services of many of these students and some from other colleges. The college students work as direct assistants in the program under the supervision of the instructional staff. One of them, who initiated a student newspaper and year book during his semester as an aide, later secured his Master's degree and rejoined the staff as an instructor. The college student aide complement of the Centers is usually 2 to 4 during the school year. Dormitory accommodation has been provided to these students at nominal cost by the Glen Lake State Sanatorium.

During its final year the project was staffed by: the Director, an Associate Director, a Program Director and an Assistant in each of the two Centers, an Assistant Director for Research and Planning, 6 case managers, 11 teachers, 1 vocational evaluator, 5 associate teachers, a psychometric technician, 5 aides, 4 college student aides, and 5 secretaries.

ADMINISTRATIVE

Under Minnesota law there are a limited number of ways in which an inter-district public school program can be operated. One vehicle is the joint board in which each participating district designates members who then jointly function like a school district. Without special legislation, however, the joint board is limited in its ability to own property and to receive state aids.

Another model for inter-district cooperation is the unilateral host district. In this structure a single district takes full responsibility for a service and allows

other districts to send students upon payment of tuition. This model does not give a voice in the governance of the service to any except the host district. Nevertheless, the unilateral host district has been the most common means of inter-district service because of its administrative and financial simplicity.

A vehicle for cooperation existed in the Educational Research and Development Council. However, it did not have the status of a joint board. For certain other purposes such as the operation of a data service and computer installation, the ERDC has brought about the creation of joint boards among some of its membership.

The structure adopted to implement Project RD-1810 was a hybrid. The Hopkins School District, in which the initial facility was located, agreed to serve as host district. This agreement carried with it responsibility for the entire project operation and for relating the project to state regulation and funding. Financial services, including employment of project staff, were provided by the Hopkins District. The other participating districts paid their tuition cost to the Hopkins District.

Area-wide voice in the governance of CSRC was provided through the vehicle of the Advisory Board. This board was responsible for maintaining close touch with the operation of the program. Its two-way advisory was to the project and to the board and Executive Secretary of the ERDC.

The board of the ERDC maintained responsibility for the administration of the grant. Meeting regularly, the ERDC Board received reports and established policy for the project.

This rather complex structure managed to serve effectively to facilitate the project, a fact which is a tribute to the high degree of trust and common interest among the parties. Full support was given to the flexible and unorthodox programming which was required by the nature of the project task.

Looking forward beyond the termination of project status, those responsible for RD-1810 sought a more permanent vehicle for administrative placement. The opportunity was provided by the 1967 and 1969 sessions of the Minnesota State Legislature. By action of that body, 15 school districts surrounding Minneapolis were authorized to form a special school district for the joint provision of vocational education, special education, and driver's training. Designated as District No. 287 this special district is empowered to act in all matters as a school district. It is enabled to conduct programs, own property, engage staff, and receive state aids. The board of ERDC requested, in early 1970, that District No. 287 accept the administration of CSRC. The new district agreed to do this, further agreeing to continue operating the service on a metropolitan area-wide basis, continuing the Advisory Board in order to give the entire service area an input to governance. The administrative transfer was made effective July 1, 1970. The Hopkins School District continues to provide many of its services.

EAST CENTER

From the beginning of project planning it was known that a single center could not likely give service on a day basis to the entire metropolitan area. Commuting

distance from the eastern half would be prohibitive, and the initial plans called for the establishment of strategically located satellite centers.

The experience of the center at Glen Lake bore out these expectations. It became evident that the eastern half of the metropolitan area would require a satellite facility and that provision would have to be made for a minimum of 100 students in that area before 1972.

Special education administrators from the area surrounding St. Paul had begun to meet on a regular basis and discuss their service needs. One of the needs formulated by the group was for a CSRC-type service. There was some consideration given to establishing an independent service as well as to the urging of CSRC expansion into its eastern half. Arguing against administrative separation was the fact that CSRC

MUELLER: I think it would be fair to say that in developmental projects like this, you need to have a pretty flexible and sensitive administrative structure to make it work.

Take the first kind of staff contracts we produced out there, for example. They were all going to be hired by Hopkins district officially, with certification handled through that district. The Superintendent out there had full confidence of his board. He was able to run that stuff by the board just by saying, "This is legitimate, and our participation is only the same as the other districts. We are the administrative organ, but that's all."

It helped to have a district where you didn't get too wrapped up in legalisms. With funds coming in from the State, funds coming in locally, Federal funds coming in, several different agencies involved, the physical facilities being provided by the Department of Public Welfare---and if there wasn't a fair degree of mutual confidence, we'd never been able to bring that thing off.

represented an established program as well as the fact that the eastern metropolitan area was already represented on the ERDC Board and on the project's Advisory Board. A meeting of the Superintendents of the 13 cooperating east metropolitan school districts, held at CSRC in November of 1967, called for the establishment of a satellite of CSRC in the St. Paul area.

The east metropolitan special educators, having formed the East Metropolitan Special Education Council and secured grant monies for a regional service office, provided encouragement and advice during the search for a facility in St. Paul. A recently closed parochial school building with 7 classrooms and a gym was leased. Key CSRC staff were transferred to the new Center. The philosophy, program goals, and general program areas were closely modeled after the original center at Glen Lake.

The new Center opened in September of 1968 with an enrollment of 18 students and a professional staff of 7. At the end of the 1969-70 school year there were 72 students enrolled, the facility was overtaxed, and an additional 20 students were expected by the following fall. Consequently, a new and larger building was located

and leased for the coming school year.

With the opening of the center in St. Paul the CSRCs became two parallel facilities operated under a single administrative direction. The administrative headquarters remain at the larger facility in Glen Lake.

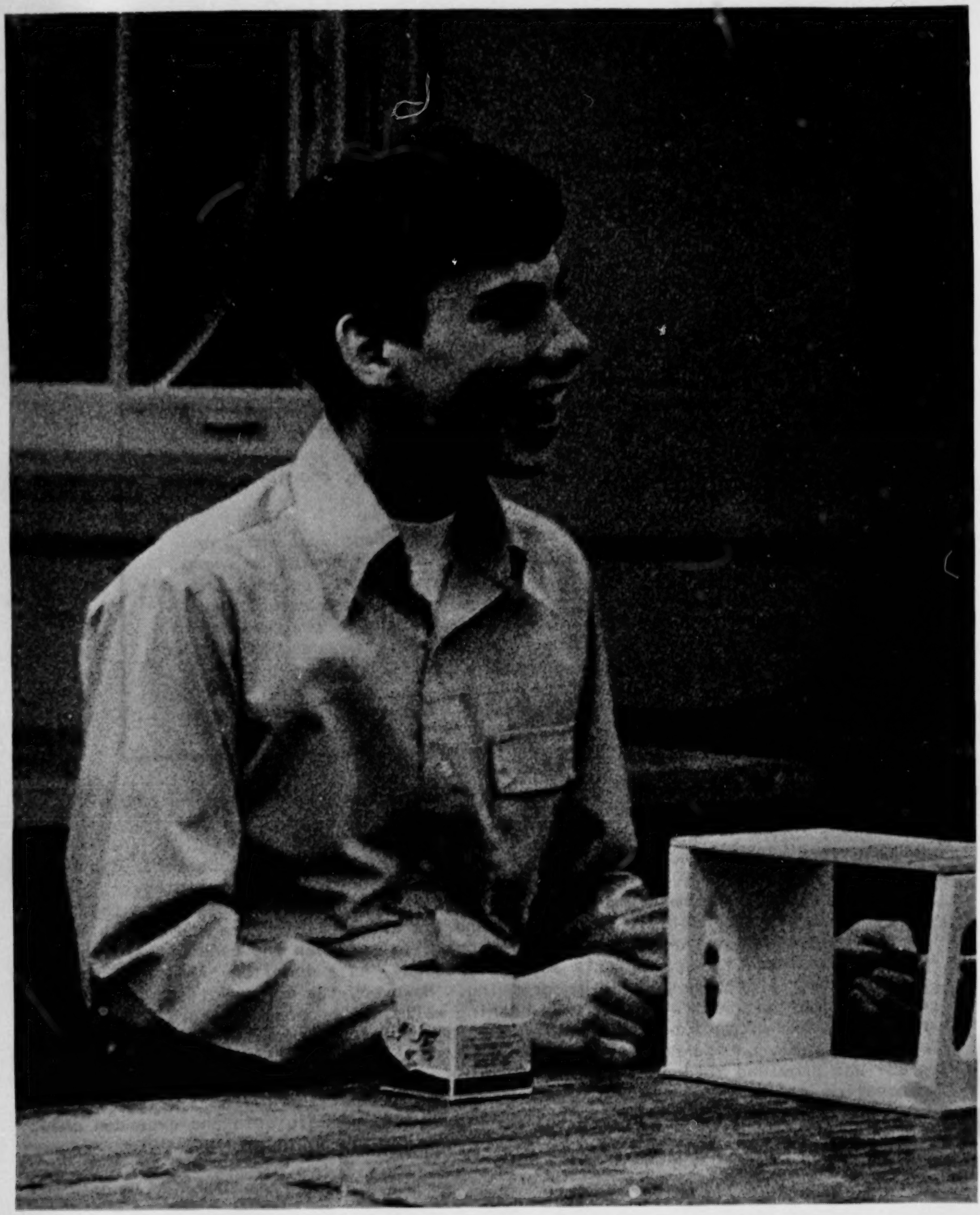
EXPANSION

Response to enrollment pressure has been limited by the physical space available to the two Centers. The pressure upon the longer established West Center at Glen Lake was partially relieved by the transfer of students from two districts to service in

> *Q: What would have happened if you'd ever had to put on the sort of presentation that the book says you should, with everything spelled out, everything accounted for, charts---could that have been done?*
>
> *MUELLER: If we were to have to draw an organizational chart on this sort of thing---I don't think we've ever done that to begin with, because it doesn't lend itself to traditional description. An awful lot has been done, it seems to me, on just mutual trust. Don't let the legalisms get in your way, either in programming or financing. The program is developmental, it's supposed to be that way; you know, give it freedom to develop.*
>
> *I think basically that the program has had that kind of freedom. There hasn't been a heavy hand on top of it, generally speaking.*

the East Center in St. Paul. By the end of the 5-year project, however, both facilities were overtaxed.

Negotiations were opened in 1968 for additional space at the West Center. The host, Glen Lake State Sanatorium, was willing to provide an additional building. It had been constructed as a male employees residence but had not been needed for that purpose because tuberculosis was reduced and the automobile era made employee housing less of a necessity. In recent years the building had been the headquarters for Civil Defense and for a sheriff's emergency squad. As a dormitory its small rooms would present a problem to CSRC programming. However, the construction was of concrete post and beam with non load bearing walls. A proposal was drawn up for renovation and brought before a state legislative interim commission. That body acted favorably on the request and allocated state funds for grant matching. The grant was provided through the State Division of Vocational Rehabilitation and renovation was begun at the end of the project. In addition to the simple provision of more space the new building will include a gymnasium-cafeteria and expanded provision for the work laboratory.



Statistics, of course, are never the full description of a person.

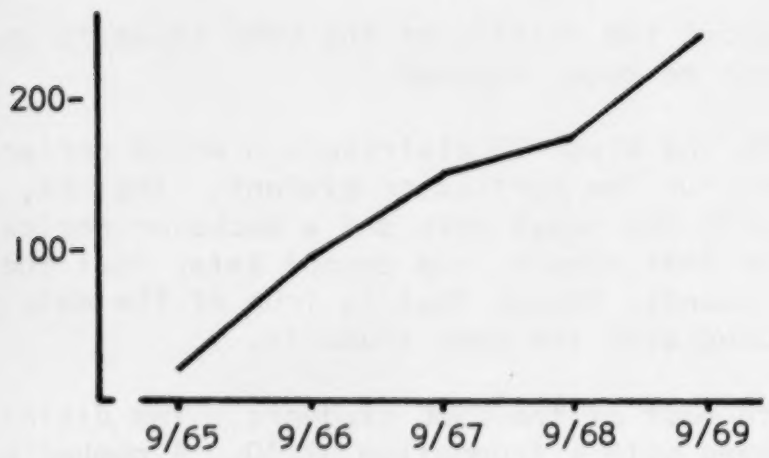
Student Characteristics Chapter 2

Students of the Cooperative School Rehabilitation Centers are defined as "less able retarded adolescents." They were so designated in the design of the project, because the distinction between educable and trainable classification seems to carry no meaningful program differential, at least at the borderline and in this age range. According to the traditional categories, the CSRC students would be classified as trainable and lower educable in level. Their age range is 14 to 21.

Since the program was intended to fill a serious service gap in the community, the operational definition of the students is that they are capable of functioning in the community and of traveling to the Centers but have educational needs that cannot be adequately met within the special education programs of their home school districts.

Both of the limits which define the CSRC population are slowly moving in Minnesota. The upper limit, set by the home district's special education program, is gradually extending its capability downward in the ability range. The other limit, set by the need for institutional placement, is also slowly dropping as the community gains in the resources which enable a severely retarded person to cope with community living. This movement of the two limits to the population seems to have had had an interesting effect upon the CSRC population trends as will be noted later.

A substantial amount of data was gathered on students throughout the existence of the project. The tabulation of that data will be found in a separate report (see Available Publications).



Enrollment in CSRC in each project year.

As a matter of project design, no additional selection criteria were applied to applicants once they had been referred by their home school districts. The responsibility for providing an educational program is that of the home school. In discharging that responsibility, the home school district might select CSRC as the most appropriate program for a particular student. In that event, the judgment of the school district was normally accepted by CSRC without further question. The purpose of this policy was to force the development of a program appropriate to the needs of whoever might need this type of residual service, in contrast to selecting students who seemed to need an *a priori* program.

It was possible to maintain this open enrollment stance throughout the life of the project. This policy did not result in the overwhelming of CSRC enrollment capability only because each district was expected to choose among its cases those who

were most in ned of CSRC service. The waiting list was kept fairly small, seldom exceeding 50 potential students who were actually waiting for an opening in the enrollment schedule. Informal enrollment priorities were worked out with the help of the Advisory Board.

The selection process within the home school districts and the management of intake at the Centers were consequently the factors which determined the student characteristics.

GENERAL IDENTIFYING

The sex ratio among the referrals is nearly equal with 194 boys and 179 girls having been referred at the time of tally. About 5% had been institutionalized prior to referral.

Their school backgrounds were quite variable. Of those four-fifths who had been in the public schools, placement in special education had been at a median age of 7, and five-sixths had been so placed before age 10. Fifty-five out of the 300-odd cases in which this datum could be checked had spent some time in a daytime activity center.

Of the 60 referrals which did not eventuate in CSRC placement or whose entrance was substantially delayed, the reasons for non enrollment were varied. Twenty percent of these cases remained in their home schools with the district discharging its responsibility in that way. Six could not attend because of insurmountable transportation difficulties, usually because they lived too far from the West Center; many of them later enrolled in the East Center. In six cases the student and his parents decided not to accept CSRC enrollment.

ABILITY

Psychometric problems make statements about the ability of the CSRC students unreliable. Some qualified description can be made, however.

There is a contrast of the Wechsler with the Binet IQ distribution which reflects a selection of the more appropriate test for the particular student. That is, the staff had a tendency to use the Binet with the least able and a Wechsler series with the most able of the students. For that reason, one cannot infer that the Wechsler yields a higher IQ for CSRC students, though that is true of the data cited here; the two kinds of tests were not used with the same students.

The Stanford Binet LM has been used with most of the CSRC students. The distribution of resulting IQs is positively skewed with a truncation at 30. A number of students have been served who do not score appreciably into the usable Binet IQ range, often because of serious communication problems. In the end-of-the-project tally, the 218 Binet IQs had a median of 46. This is about 4 IQ points below the average after the first year or so of the project. Direct comparison cannot be made because the sampling of those who were tested by the Binet could not be controlled. However, this slight decrease over the time occupied by the project is

consistent with the other observations to the effect that a less able population is being selected for referral.

Many of the students in the course of their service at CSRC were administered one of the Wechsler Intelligence tests. Verbal IQs are available on 167 students and performance IQs were obtained in 172 cases. The median verbal IQ of those students who were given the Wechsler was 65. The median performance IQ was 63. Again, the distributions are sufficiently skewed that an incorrect distribution would be reconstructed from the means and standard deviations.

The Wechsler subtest scores show interesting distributions. Zero scores on particular subtests are not uncommon, especially on Digit Symbol, Vocabulary, Similarities, and Comprehension. On these subtests there were many students who could not grasp

TABLE 1

DISTRIBUTIØN ØF THE IQS

PERCENTILE, CSRC STUDENT PØPULATIØN

TEST *	10TH	25TH	50TH	75TH	90TH	# TESTED
BINET LM	32	39	46	53	64	218
WECHSL VBL	47	54	65	72	83	167
WECHSL PERF	44	51	63	74	85	172
PEABØDY	45	55	67	78	94	286

* THE DIFFERENT TEST DISTRIBUTIØNS REPRESENT, TØ A SUBSTANTIAL EXTENT, DIFFERENT STUDENTS. NØT ALL STUDENTS WERE GIVEN THE SAME TEST. SEE TEXT.

the nature of the task well enough to obtain any scored responses.

The Peabody Picture Vocabulary Test was administered to 286 students. Though an IQ can be obtained from this test, it naturally does not represent a broad intellectual function. The median score for these students on the Peabody was equivalent in its restricted range of function to an IQ of 67. This test is one of the few instruments which yields an approximately normal distribution in the CSRC population, in-

dicating that its difficulty level is appropriate to this group of students.

FUNCTIONAL LEVEL

There are two major evidences for the functional level of students entering CSRC. One is the Vineland Social Maturity Scale, essentially a tally of the level at which the subject is functioning in several areas of the competencies of daily life. The other evidence is found in the parent interview record, containing statements about the day-to-day competencies observed by the parents.

Social quotients derived from the Vineland Social Maturity Scale were obtained on 247 enrollees. The median Social Quotient was 56 with a range from the low 20s (and one anomalous case of SQ 7) to four cases of 100 or above. Since the Social Quotient is primarily a measure of non school achievement, it can be presumed that the students with the higher SQs exhibited more competence in daily social living than they did in the school situation.

The parents reported daily function at the time of enrollment in a number of life competencies. This information was obtained on approximately 250 cases.

Some 17% of the students were reported to have no friends. Over half had one to three friends, and only 27% had four or more. This indicates a more restricted circle of acquaintances than is usual in this age range.

Almost all of the parents reported that the student did errands at home and over half of them were said to do them well. Eighty-two percent were reported to use hand tools.

Slightly over half were reportedly able to stay home alone and another one quarter could stay alone for short periods or in emergencies. The community mobility of one-fifth of the students were effectively restricted to their home and yard, but two-thirds were able to travel independently in the immediate neighborhood; 14% were able to travel about their entire city or general community. On the other hand, 63% were reportedly not able to use public transportation independently and another 13% had no public transportation in their home areas.

The parents reported that 45% of the students were not able to make change and handle money. Twenty-five percent could manage change quite adequately, and the remaining 30% had some capability in this area.

The parents were asked whether they considered their child to be mentally retarded. Eighty-three percent of them said that they did, with a very high degree of agreement between the two parents.

When asked what kind of work the student was capable of at the time of referral, 38% of the parents replied, "None." A third of them considered their student to be capable of competitive employment, and another 29% believed that sheltered employment was their current level of employability. The parents were also asked to forecast the level of employment of which the student would be capable in the long run. Sixty-eight percent said that their child would probably reach competitive

level, another 28% expected sheltered employability, less than 2% mentioned adult daytime activity, and approximately 3% did not think that their child would ever be employable at even the day activity level.

In the realm of school achievement it is difficult to make a meaningful statement about the CSRC enrollees except in terms of subjective judgment. Only some of the students were capable of scoring on the norm of standardized school achievement tests. The impression is that their achievement was lower than would be predicted from their IQ distribution.

ETIOLOGY

In a non-medical facility such as CSRC, even though medical reports are required, it is not possible to give a completely accurate tally of the etiology of the students' retardation. However, enough was determined regarding etiology so that some guarded statements can be made.

Whenever possible, the etiological conclusion was drawn from the medical report. This procedure served well in instances of clear-cut specified syndromes such as mongolism.

About 12% of the cases referred to CSRC were retarded due to mongolism or Down's syndrome. When other clearly identified syndromes are added to this, the total proportion of "clinical-type" constituted approximately one-fourth of the referrals. Over one half of the remainder were reported to have some kind of cerebral dysfunction. There certainly is a great deal of evidence in this population of the kind of psychometric and behavioral characteristics which are generally associated with dysfunction of the central nervous system. Only a minority of the CSRC population can be classified as cultural-familial in etiology.

Several lines of indirect evidence, including the ranges and shapes of psychometric score distributions, lend credence to the supposition that perhaps the majority of the CSRC students are each retarded for a single catastrophic reason. This is in contrast to the preponderance of cases simply representing the low end of the normal curve which one finds in most public school EMR classes. Lack of reliable data prevents more definitive description of the etiology in the CSRC population.

GEOGRAPHIC

Initially, when there was only one Center, the population which could be effectively served had to be located in the western half of the metropolitan area. Attempts were made to bring students from farther away but with limited success. The opening of the East Center in St. Paul enabled service to essentially the whole of the 7-county area. However, the highest service density continued to be within an average commuting radius of about 20 miles. An occasional student has commuted as much as 45 miles each way, but that is exceptional.

Students commute daily to the Centers on the responsibility of their referring

school district. A variety of transportation modes is used. School buses serve the larger districts and some combinations of districts. In a few instances private cars have brought students, sometimes linking up with one of the bus routes. Fortunately, most school districts are staffed with specialists in the matter of pupil transportation. It would have been very difficult for the project to adequately staff a transportation unit.

The CSRC students are drawn randomly from the general population distribution in the service area. This is in contrast to most public school retarded caseloads; generally speaking, the mentally retarded in an ordinary school system tend to come more from the socially deteriorated parts of the district than from "middle class" neighborhoods. The CSR C students, in contrast to this usual distribution, are random georgraphically, and their fathers' income distribution is approximately characteristic of the full range in the service area. Unlike the typical public school retarded population, the CSRC-type of retardation can "strike anywhere."

An analysis by school district was made of the West Center's population in the course of planning for the East Center. At that time the placement rate (CSRC enrollment divided by total senior high enrollment of the district) was approximately equal in the suburbs and in the more rural extended area and about half of that rate from Minneapolis. A similar tally at the end of the project and embracing both halves of the metropolitan area shows: for the two central cities 15 CSRC students in proportion to each 10,000 senior high students; for the inner-ring of suburbs 40 per 10,000; for the extended and more rural area 33 per 10,000. These figures should not be taken as a prevalence rate since that would require an equation with the CSRC age range, a figure more difficult to come by from public records. The proportionate rates given do, however, indicate that the placement from the central cities is in a lower proportion. The most likely explanation for this is that the large core cities, together having about 40% of the public school enrollment in the 7-county area, have developed special education programs that have a smaller residual of unmet needs. A secondary explanation is that each of the two districts would, if they used CSRC proportionate to their size, have such large enrollments as to cause a very large tuition obligation.

SUMMARY

Despite the difficulties in assembling uniform data on these students, the CSRC population emerges as a fairly coherent group. This finding was not necessarily anticipated because of the way in which the population has been selected. That is, the students are defined as those who are too retarded to be most adequately educated in whatever special education program is offered by their home school districts. No limits were set on their formal characteristics, and no criteria were applied other than the fact of the school districts' referrals. Consequently, their formal characteristics, insofar as they present a consistent pattern, are evidence that this referral process does generate a definable group of students who have a somewhat coherent set of program needs.

They cannot be meaningfully characterized as either educable or trainable. Psychometrically they cross the border between these two traditional categories. Practically speaking they are almost all capable of being educated in the sense of becoming better prepared for optimum function in whatever life offers to them. Only three had to be terminated from CSRC because no appropriate program could be devised from them. Though a categorization into educable and trainable could be done on the basis of

IO, the experience of the project clearly shows that this is virtually unrelated to the kind of educational program needed in the individual case.

The students are alike in that their ability and functional level is such that the ordinary special education program is inappropriate for them. Admittedly, there is quite a range in the kinds of programs offered within the 47 various districts which participated in this project. In spite of their representing such a diverse range of programs, none of the districts is individually capable of mounting the multi-option, flexible, innovative, and diversely staffed program offered by the CSRCs. This is the service gap which existed in the community, and the student body which has emerged by the CSRC referral route are those who were not adequately served before.

In summary: the students are very inept in the standard school program, are predominantly the kind who can be clearly identified as retarded rather than simply slow learners, most of them appear to function at the retarded level because they have serious deficiencies in general intellect, and (though this fact does not show up in the tabulation of their formal characteristics) they seem to respond well to a program oriented to imminent preparation for life with a strong vocational emphasis.

MUELLER: I think the big variable in this program is no different than any other program in the districts; if you can identify the right people, get a staff that is highly motivated. Certainly the kids and the parents are motivated with the kind of parental---I'm still amazed at the impact these programs have on parents. Many of the parents of these kids, the interest the parents have, the support from parents---well, I have trouble handling some of those things like the PTA meetings out there when the parents are so overflowing that it embarrasses me.

Q: It is an embarrassing thing.

MUELLER: It's different from parents harping on you all the time. If you got to go one way or the other, that's the way to be.

Electronic teaching aids and programmed learning materials, such as are now available, enable special education techniques which were not possible a few years ago.

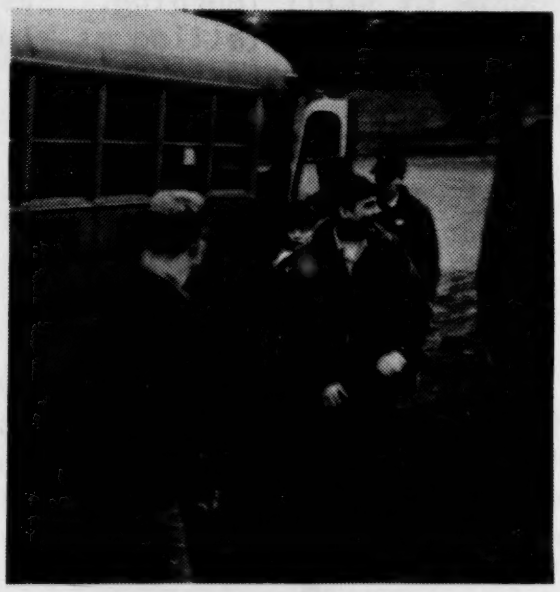
The program of CSRC, in the sense of a curriculum for the individual students, has never been considered a fixed or closed-ended and finite list of options. Instead the Centers have drawn upon an assortment of program areas with the areas changed or modified from time to time.

Program of CSRC

Chapter 3

Each student has physically moved during the day through a rotation of program areas. The student programs are each unique in the sense that each student moves independently of the schedule rotation of any other student. During the first year or so of the project, students were moved as groups, with the groups made as homogeneous as possible with regard to their program needs. Eventually the program became large enough and the exceptions to group movement became common eough so that individual programming appeared to be more appropriate. IBM card punching and sorting equipment was available, leading to the management, sorting, and printing of student programs by that means.

Most of the students entered CSRC without previous experience in this type of programming. Most of those who entered directly from their home schools had been in self-contained special classes and had not moved from classroom to classroom during the day. At the least, they had had a special class which served as "home base" within the school building while they attended a limited number of regular classes. At CSRC, there being no self-contained classrooms or resource rooms in the usual sense, each student is simply programmed to those program areas which appear appropriate. A particular student's schedule, as an example, might be: "home room" in the music room, industrial arts, Montessori, language center, lunch, Social Perceptual Training, maintenance training, and physical education. In addition to the brief home room and to the lunch period each student has six program periods scheduled during the day. The normal school day is from 8:45 a.m. to 3:00 p.m.



Doug, whose day at CSRC illustrates this Chapter, arrives on the bus from Bloomington.

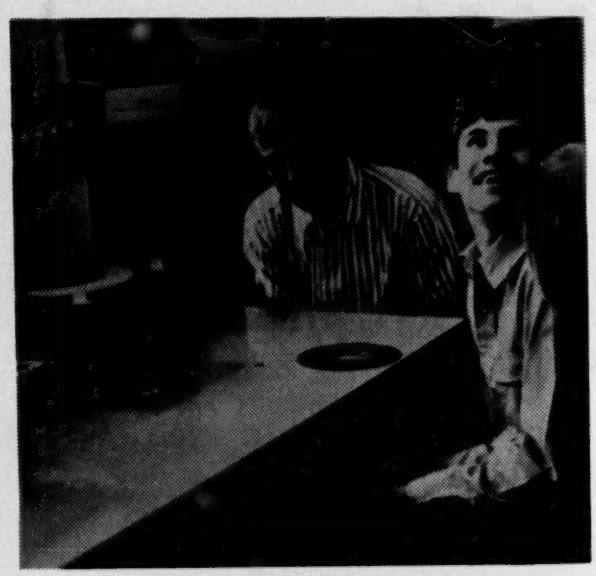
The period of time between the students' arrival at the Centers and the beginning of the scheduled day might not properly be termed a program area. On the other hand, it is the impression of the staff that this time, which could have been potentially a lost or even a negative experience, was actually a very constructive part of the program. Staff, both instructional and supportive, were scheduled to supervise this period of time. Over the life of the project this part of the day gradually structured itself into a time of relaxation and enjoyment with music, dancing, and social interaction.

The description of program areas which follow are necessarily brief. For more

detailed program descriptions, including some not listed here, see "Program Area Descriptions" under Available Publications at the end of the report.

Academics

The academic classroom is designed to teach the conventional academic skills at a level and in a concentration which is adapted to the limited capability of this kind of student. Every effort is made to relate academic functions to the real life demands for which they are preparatory. The content of the academics class has changed over the life of the project. Initially, there were two such classes, one at a much more basic or pre-academic level than the other. The functions of the basic class later were transferred to a modified single academic class and to such other program areas as Montessori. The academics class at CSRC is the one which looks most like the ordinary school classroom. Content includes handling money and making change, telling time, how to fill out application blanks, reading want ads, how to use community resources when seeking employment, and the social skills needed to secure and maintain a job. The understanding of basic concepts, visual discriminations, and verbal expression are also emphasized in the course of skill learning. Systems for teaching the use of money and telling of time are described as program innovations in another chapter of this report.



Doug, whose home room is in the music classroom, has brought some of his own records.

Arts and Crafts

Aiming at personal development and enrichment, arts and crafts is an unstructured class in which students make a variety of projects for themselves, their families and the school. The major goal of this area is to teach the student skills which he can use during his leisure time at home. Creativity, with which retarded students are better endowed than has been sometimes assumed, is encouraged.

The medium which is used depends upon the skills of the students. Clay, wood, cloth, yarn, paper, paint, and nature items are a few of the things used and are suggested to the student to correspond with his ability so as to assure some reasonable success. The student's accomplishment of the project as his own production has been considered important, with the teacher feeling that a sound recreational outlet for the student is more likely when he has learned how to initiate a project, follow directions, and complete the project.

Home Economics

The purpose of home economics is to teach the student how to function more independently at home and, in some cases, on the job. It is an active informal class

in which many different topics are studied: foods, grooming, housekeeping, clothing, first aide, nursery school, and family development. A program in grooming is given to girls by a certified beautician every Friday. There, the student learns how to wash and set her own hair as well as fix the hair of others.

Whenever possible, practical experiences are used to teach the area studied. For example, in the foods unit the students plan, prepare and serve lunches to a selected group of students participating in a diet program. In clothing the students shop for material and patterns, and upon completing their garments, present a style show for the entire student body. To learn something about child care, students plan and implement activities for 10 to 12 pre-school children enrolled from the immediate neighborhood.

In general, the attempt is made to apply what is learned to real life situations. An apartment, kitchen, laundry room, and small dormitory have been set up within the physical plant of the West Center in order to implement this. During the school year and summer, groups of students are invited to stay for a week in order to provide them training in household cleaning, food preparation, grooming, and the use of leisure time. Both boys and girls, in separate groups, have participated successfully in the apartment living program with 24-hour supervision provided by the staff.

Independent Living

The program area called independent living is similar to the home economics just described except it is offered at a more basic level. This class reaches a segment of the student population that otherwise would not have exposure to home economics. Both boys and girls are taught simple cooking, home skills, grooming, self care, and the social amenities. The class is designed to increase the student's ability to function more independently and to be more helpful and better integrated into home life. This program area is intended to teach each student to dress himself satisfactorily - button clothes, work zippers, take wraps on and off, tie shoes, hang up clothes, comb hair, brush teeth, wash hands and face, and take care of personal needs in a socially acceptable manner. The boys, especially, are taught simple home maintenance skills. An aim of this program area is to produce a more confident, secure human being.

Doug gets started on a Montessori task.

When a student shows enough potential in independent living he may be moved to another class to further build upon his skills. If a girl shows aptitude for food service she may progress from this area to regular home conomics.

Job Training

While employability is a strong thread running through all of the CSRC program areas,

some specific areas are set aside for this particular kind of preparation by means of graded introduction into the experience of real work. This is in addition to the work laboratory (entitled manipulative dexterity) to be described shortly. Real work job training has been given in food services, maintenance work, and a variety of jobs which are unique to particular students. Program areas in most of these occupational classifications have been formerly organized into curriculum units of the CSRCs. The job training program areas, conducted by the CSRC staff under the responsibility of CSRC as a public school will be described in a later chapter of this report. In addition, on-the-job training has been frequently arranged under the financial sponsorship of the State Division of Vocational Rehabilitation. The OJT is typically secured by CSRC staff in consultation with DVR personnel and may be provided while the student continues part-time attendance at one of the Centers in a continuation of other program areas.

Language Center

The language center uses programmed learning material designed to teach reading skills, alphabet, phonics, basic concepts such as right and left, driver's manual, tool identification, and occasionally specific job skills tailored to the need of the individual student.

Reading programs in the language center are designed for students who have sufficient grasp of very basic readiness, such as can be attained in the Montessori area. One reading program uses the Sullivan Reading Series, taped for use in a tape recorder. The students almost without exception are able to manage the mechanics of the tape recorder unassisted. Because of this, they can work individually and each at his own pace and still get the verbal response needed in reading and word attack skills. Students who already have functional reading skill work on SRA materials designed to increase comprehension.

A parts box for use in the industrial arts program calls for exact angles.

The language center uses the Fernald program as a tactile approach to reading and writing. This seems to work best with socially outgoing students who learn better in small groups than individually. A summer program has been initiated using the Mitzel functional word lists, with parents as tutors.

The use of the Language Master has provided this area with the ability to compliment other program areas at the Centers. For example, a program in tool identification provides the student with information needed as a basic foundation in industrial arts. Other programs being used or developed include basic word lists (men, women, stop, etc.), driver's education manual, color and position concepts, and the nomenclature of various job training areas.

The development of this program area is still comparatively primitive, as it has

been in operation for only one year. On the other hand, the possibilities appear to be great because of the opportunity to individualize in regard to student progress, rate of speed, and idiosyncratic needs to learn.

On his way to job training in the Sanatorium cafeteria, Doug punches his time card.

Manipulative Dexterity

This program area in each of the Centers strongly resembles a sheltered workshop in appearance. Most students have an opportunity to work at real or closely simulated job tasks during one to two hours of the day. They are evaluated as to their work habits and other employment characteristics. The medium of work is used in the technologies of vocational evaluation and work adjustment so that employment characteristics are both evaluated and modified. (Incidentally, the "Vocational Evaluation and Work Adjustment Bulletin," a publication of a professional division of the National Rehabilitation Association, was collated in the West Center's manipulative dexterity's shop for the first year.) The class is designed to develop good work habits and attitudes and focuses upon traits such as punctuality, responsibility, endurance, competitiveness, frustration tolerance, reaction to supervisory pressure, production rate, and quality of product. The skills of eye-hand coordination and gross and fine hand and finger dexterity are developed. Tasks include the packaging of small novelty items, involve stuffing and collating, a weigh and packaging operation using unfinished glass lens blanks, and a variety of simulated work tasks.

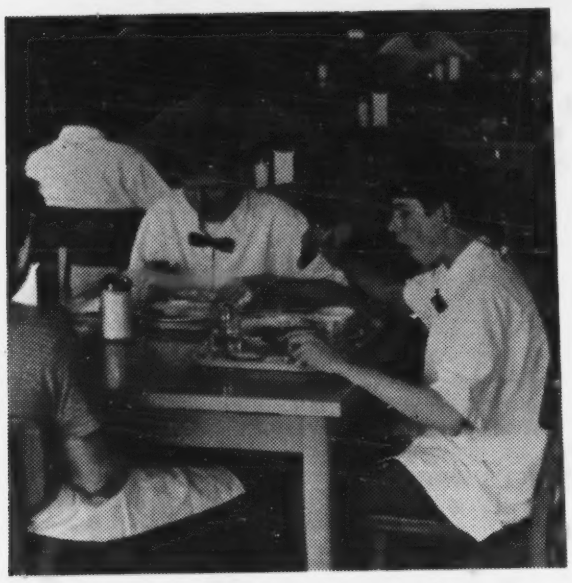
Reinforcement for work has experiementally involved monetary, M & M's, and intangible rewards. Superior production is rewarded by appointment as Supervisor of the Week, giving students the opportunity for development of a new kind of social skill. Pay checks, cashed in a simulated student-run bank, have been tried with some apparent benefit.

Montessori

This program area, conducted by a fully qualified Montessori teacher, differs from the usual practice of this educational method in that the classroom is not self-contained. Students are programmed to this area on the basis of one hour per day, typically, in the same way that they are programmed to other CSRC program areas. The Montessori method, in its formal sense, has been conducted only at the West Center, and then only in the 1969-70 school year. It appears that adaptation to a class schedule is possible, although some students appear to need more than one hour per day of Montessori training.

Maria Montessori held that all of a person's cognitive behavior, including intelligence, memory, academic functioning, reasoning, etc., rests on sensory-motor learn-

ing. She designed a program where children are very carefully, perhaps rigidly, guided in sensory-motor learning. The ordinary CSRC student no longer has the so-called sensitive period found in normal children from age 2 to 6, so that they have a learning pattern developed over the years which is difficult to change. Still, many of them appear to be making progress under the Montessori program. All materials are designed in steps of difficulty and are self-correcting. The Montessori difficulty range allows almost every CSRC student to experience success in his own learning level. The concreteness of the Montessori approach appears well suited to this kind of student. Formal evaluation of the differential impact of the Montessori program has been conducted with the analysis available as a separate report. (See list of Available Publications.)



Lunch for the bus boys is served early. Doug has his white jacked on and his instruction-receiving radio is ready.

Music

A major goal of the music activities is to make the group into a friendly and cooperative whole. Emphasis is on playing together and singing together to achieve the most pleasant sound. In this, the individual is important as he uses his voice, plays his instrument, or conducts with the group to add to the achievement of the whole. The hope is that the individual student will not only enjoy himself but also have a feeling of pride in what his class has done together.

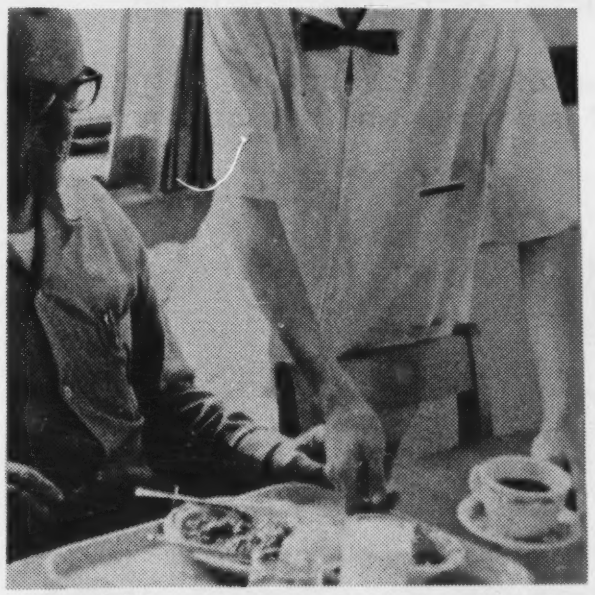
Because music is so much an art form, the CSRC music program has undergone basic changes as a result of change in music teachers. The initial program, conducted during the first 4 years of the project, emphasized music as a medium for development of such basic capabilities as laterality and multi-limb coordination. The 1969-70 music program has more strongly emphasized the enrichment of the student's cultural life in terms appropriate to his characteristics and circumstances. Value is attributed to both approaches.

Class activities now include a special unit on American music forms, depicting the different types of music from folk to classical. Chord organs have been introduced, using color-coded notes with students often working in pairs in which one points to the notes while the other plays. The more mature and responsible students have been able to take less able students as their partners and thus practice a social relationship in which they have had limited experience. A set of drums has been used quite extensively throughout the life of the project as a controlled and constructive personal release. It forms the nucleius of the school rock band. Rhythm instruments predominate in the student performance and groups sing around the piano. Using a baton, the student learns to conduct to the tempos and moods of the music;

this is often done in front of a 3-way mirror to help a student establish his own body image and movement. The music program has been conducted daily in the West Center. During the 2 years of the East Center the music teacher has spent one day per week there with aides conducting the West program on that day.

Physical Education

The goals of physical education are to help the students develop a wide range of interest and skills for leisure use in individual, family, and group participation. While doing this the students are helped to appreciate their ability, both mental and physical, so as to create increased self-confidence and self-control, and to add to their overall personal stability.



Besides clearing dishes and cleaning tables, the bus boy brings more coffee when requested.

Group sports are often modified to meet the characteristics of CSRC students. Some sports, however, can be used unmodified. A team of CSRC students participated in the floor hockey competition at the Olympic competition for the retarded held in Toronto in 1969. Besides group activities, students are helped to increase motor control and coordination, physical fitness and endurance by individual physical education. The balance beam, chinning bar, Exercycle, treadmill, trampoline, and Slim Gym have been used.

Competitive sports have begun to play a more important role in the CSRC program to help students understand sportsmanship, self-determination, and school spirit. Wrestling was introduced during the final year of the project and seemed to provide a new school identity and sense of group achievement. Track and field, bowling, and field hockey have also had a part in the competitive physical education. All CSRC students, including the physically handicapped, participate in physical education. Field days have featured competition between students of the 2 Centers and with other retarded groups from the community.

Sewing

Sewing is an extended but independent area of the home economics program and is designed to teach the students recreational and possibly vocational skills.

Sewing machines with gear shifts are used to permit the beginning student to sew very slowly but with full power and control. Students work initially on school projects such as drapes, aprons, and smocks. Individual projects sewn by the students include dresses, jumpers, skirts and pants suits. Other skills taught in the class include knitting, the sewing on of buttons, mending clothes, ironing, and the

use of washer and dryer. Both boys and girls are exposed to these latter tasks. A number of sewing-related techniques adapted to the characteristics of the retarded have been used. Among the most promising of these appears to be knitting, using a circular frame.

For the student who shows unusual ability in sewing, both in quality and production, there is access to several power machines in the Glen Lake Sanatorium. This is then used as a job training station with instruction supplemented by the CSRC staff.

Social Perceptual Training

Successful community living includes the ability to move in and out of a number of settings and situations and to function acceptably while within them. Social Perceptual Training is a specific curriculum designed to teach social perceptual skills needed for community living. The program is designed to attune the students to the multitude of social signals, such as voice intonation, facial expression, postural stance, gestures, etc., as well as to the less personal signals, such as those given by a traffic light. In this way, the student gains the basis for emitting behavior appropriate to the cues or signals in his environment. Social Perceptual Training was one of the curriculum options in the West Center during 1969-70. A more technical report of this curriculum experiment is available separately (see list of Available Publications).

In the language center, Doug works on one of the more advanced Sullivan reading lessons.

The materials used are those developed by Edmonson, Leland and Leach in VRA Project RD-1388-P in Kansas. Their kit consists of some 50 lessons in script form that present a progression of concepts in social cue perception. The lessons are dependent upon a repertoire of projected slides, tape recordings, seat work, quizzes, competitive games, role playing, and field trips. The Test of Social Inference, also developed in Project RD-1388-P, was used as a post-test in the curriculum experiment.

Co-curricular Activities

A wide variety of co-curricular offerings has served to make the CSRC program similar to that of other public schools. Style shows, assemblies, dances, parties, a student council, and student publications have been offered. Perhaps most of these students get their first experience of full participation in these activities when they come to CSRC. Those who had been in school before had usually been left in the background or had felt unable to compete with their more able classmates.

Curriculum Overview

The diversity of the CSRC program offerings is self evident. The list just given is a reasonably complete tally of the program as offered in the final year of the project. Along the way other offerings had been attempted, some of them successfully. A few related matters will be discussed in the chapters dealing with innovations and supportive services.

The discussions in 1962 which led to the formation of CSRC had not at that time envisioned a diversified program. Two or three self-contained classrooms for the trainable were first proposed. The diversity which characterizes the present program came about over a period of time and as a result of several factors.

There was a commitment to program diversity and to some of the basic emphases of the program which resulted from the initial staff selection. These people had had successful experience with programs which were more than self-contained classrooms. CSRC's first year program was an adaptation of some of that experience, especially that of Project RD-681 in Minneapolis.

A potent factor in enabling program diversity is the size of the facility. Economies of scale have something to do with this, but more important is the fact that a larger program has a larger staff. The CSRC program has grown out of the diverse capabilities of the diverse staff. Further, the new blood infused by the college student aides deserves some of the credit for the program's innovative thrust.

The firm administrative position which kept program and staff activities open-ended is another factor.

The climate of change in special education should be given some credit for the CSRC program diversity. Experimental programs are more acceptable now than they were even a few years ago.

Wrestling brings the action and challenge which Doug enjoys so much.

Finally, and perhaps most significantly, CSRC was deliberately created to deal with a task where a serious service gap existed. Students were referred because adequate programs for them did not exist. The project was called into being in order to break new ground. Under these circumstances it suffered very little inhibition from regulatory and supportive authorities who might say to an established program, "The book doesn't say that you can do that."

Student artwork enlivens student publications -- here, the lead article covers the wrestling match with the Owatona State School.

Student Outcomes

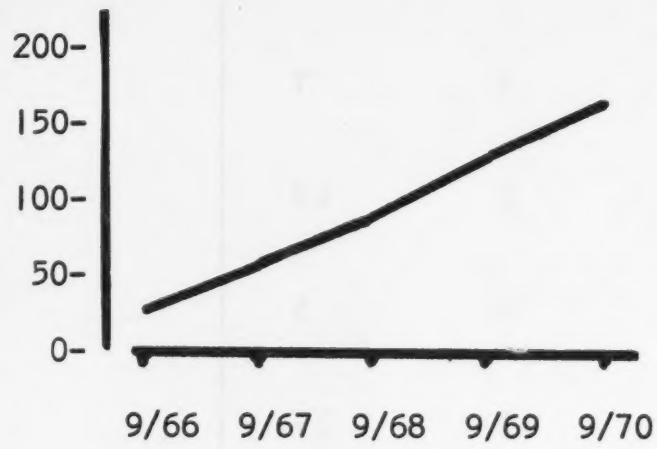
Chapter 4

Two viewpoints have guided the CSRC in planning student outcome and in following up what the outcome actually has been. The first viewpoint is that proper concern of an educational program is with the whole of the student's life rather than only occupation. The second viewpoint is that the outcome to be valued for a particular student is determined by his opportunities and potentials rather than by a single arbitrary status to which everyone "should" attain.

Follow-up must almost necessarily be in mind when a service program is designed. At the very least there must be some idea of what the outcomes should be or can be so that the program may have goals. It is naturally better to actually carry out the follow-up as the program develops, and the status of the client at follow-up should be looked at in terms that resemble as closely as possible the terms in which the program was designed. For example, for a program that has occupational outcome among its primary goals, the follow-up appropriately stresses occupational outcome.

On the other hand, the occupation of the former student is only one of the areas of life competence for which the CSRC program attempts to prepare him. Competence in community living, the use of community resources such as those of recreation, travel competence, the consumption of personal supervision, family satisfactions and convenience, and the satisfaction of the former student himself should be considered in a follow-up of former CSRC students.

The sense in which occupation is discussed in this report should be explained. It refers to the full range of the occupation of manpower. Included are: competitive employment, sheltered employment, work activity, adult daytime activity, home occupation of a productive nature, home occupation of a time-filling nature, and even the constructive participation in supervised or custodial living. This range is broader than has been considered in many rehabilitation projects. However, it has been the viewpoint of this project throughout its development that the outcome to be valued in each case is determined by the potential and the circumstances of the individual.



Cumulative Curve, egression of students from the CSRC program (9/70 anticipated).

This viewpoint which assigns value to whatever might be the optimum outcome for each client is perhaps forced by the realities of the CSRC population. In the field of occupation it is simply out of the question at this stage in rehabilitation technology to aim for competitive employment as an outcome in all cases. If the viewpoint had been adopted that competitive employment is the

only valued outcome, or even that competitive employment should be valued more highly than any other outcome in each case, the inevitable consequence would be a devaluing of students who have different outcome potential and a gradual shift of policy so as to screen out from service those who need preparation for other outcomes. The project was, after all, designed to serve the needs of the less able retarded adolescent. Intake criteria were deliberately designed to admit those who needed service in order to find out what service they needed. Since this value system determined CSRC caseload and program it appropriately underlies the CSRC case follow-ups.

EGRESSION

Egression is a strange word necessitated by the manner in which a student leaves the CSRC program. There has been no fixed schedule for "graduation" and students

TABLE 2

ØCCUPATIØNAL STATUS ØF CSRC STUDENTS AT FØLLØW-UP.

STATUS AT FØLLØW-UP	DATE ØF FØLLØW-UP JAN.67	JAN. 68	JAN.69	JULY 70
CØMPETITIVE EMPLØYMENT	25	38	55	90
SHELTERED EMPLØYMENT	0	0	9	15
WØRK ACTIVITY, DAY ACTIVITY	0	0	1	7
ØTHER PUBLIC SCHØØLS	2	9	5	10
INSTITUTIØN-ALIZED	1	3	3	5
ØTHER STATUS	3	14	18	37
TØTAL FØLLØWED UP	31	64	91	164

either leave as their needs and opportunity determine or they remain in the program as long as public school responsibility can support their progress. Movement into a full-time job or the attainment of age 21 have been the major immediate causes of egression. Very few students have left the program due to personal dissatisfaction or the inability of the project to deal with them. Graduation and

drop-out are consequently terms which cannot be applied to the major kind of student departure. Egression has been chosen as a neutral but descriptive word.

Egression began during the first year of the program with 5 students having left before the end of the school year, 1965-66. Because it is difficult to know which

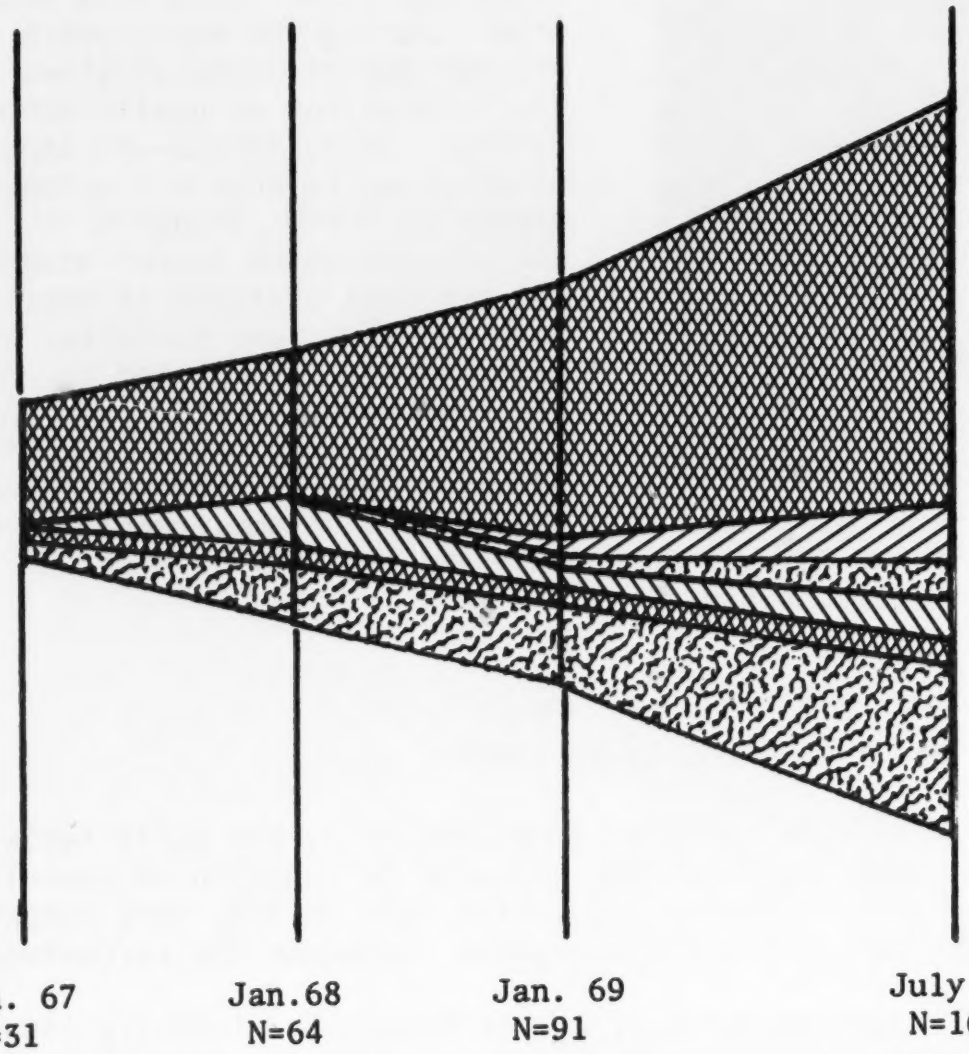


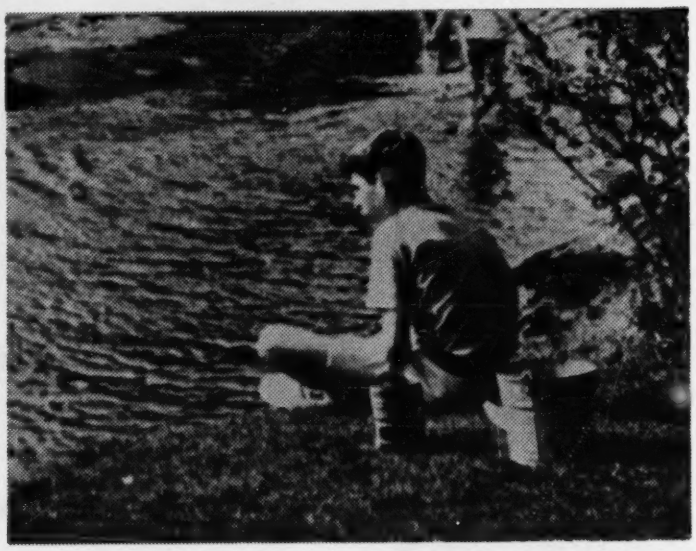
Fig. 1
Occupational status of all CSRC students who had egressed by each of four follow-up dates.

students leaving in the spring will not return in the fall, the end of the school year was not used to calculate egression. Instead, egression was counted after the beginning of the fall term each year. By September of 1966, 22 students had egressed from the program. The subsequent years' egression figures are: September 1967, 53; September 1968, 88; September 1969, 121; September 1970 (estimated from July follow-up), 164.

At least annually, follow-up was made of each student who had egressed from the CSRC program. The major focus of each follow-up was, as noted, occupation. In contrast, the follow-up conducted in mid-1969 was designed to cover other areas of life competence and was conducted in somewhat more depth than were the others. It

is reported together with the 1970 follow-up data (see list of Available Publications at the end of this report). Some of its highlights will be reported here.

The process whereby a student egresses from the CSRC program is one of the important determinants of follow-up figures. Those students who are most ready for employment naturally predominate among those who first leave this kind of program. During the early years of the project few students attained age 21 and the termination of public school responsibility. Early follow-ups should therefore be expected to show a disproportionate number of former students in employment. The proportion of former students in the occupational statuses of sheltered work, work activity, day activity, and dependence should be expected to increase. The experience of CSRC over the 5 years of its existence has borne out these expectations, except that the proportion in competitive employment has held higher than had been anticipated.



What can you do with your spare time? You can go fishing - if you like to fish, and if there is a stream nearby, and if it's summer.

1970 FOLLOW-UP STATUS

The students of CSRC, it will be recalled from Chapter 2, are quite seriously retarded. Nevertheless, about half of them are able to function in competitive employment. At the July 1970 follow-up, 90 of the 164, or 55%, were competitively employed. The inclusion of sheltered employment increases the percentage to 64%.

Work activity and adult daytime activity are in Minnesota virtually identical in the nature of the program. Those adult daytime activity centers which have not secured Federal certification as work activity centers do not pay a wage. Work activity is the legal (Federal) status of certification, and daytime activity is licensed and partially supported by the State Department of Public Welfare. There were no work activity centers and a limited number of adult daytime activity center programs in the CSRC service area in the early years of the project. Only the 1970 follow-up figures show former students in these statuses. The growth of these services in the metropolitan area is at least partly due to the efforts of the project staff (see Staff Activities). Seven former students were so occupied in July of 1970, and the proportion may be expected to increase in the future. Perhaps one-third of the CSRC caseload, according to staff estimates, will need facilities for this kind of outcome within the present capability of rehabilitation technology.

The number of students who were in other public schools after egression from CSRC deserves explanation. Four of the 10 so occupied at the 1970 follow-up had moved with their families out of state and had enrolled in public schools there. Six

who were attending local public schools had been at CSRC for only a brief time. Their circumstances then changed or potentials were discovered during the CSRC tryout so that return to their home school districts was possible.

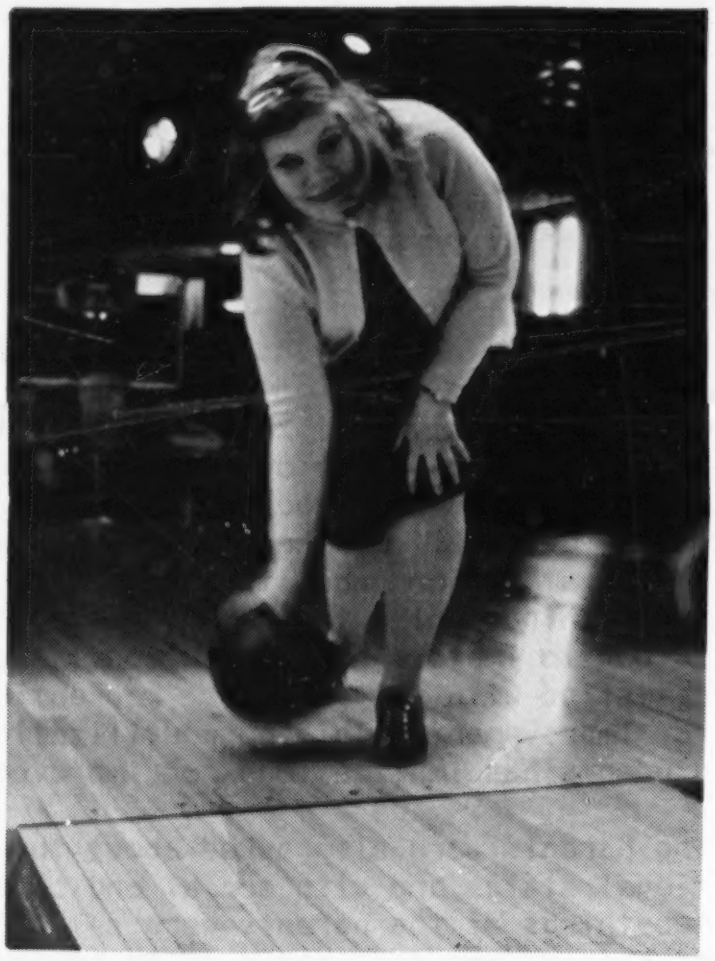
Several egressed students are either attending or scheduled to attend non public school training programs. They are not separately indicated on the occupational status charts of this chapter, being included in "other" category. Three were enrolled in such programs (in a private training institution, in a rehabilitation center, and in an area vocational school as an adult student). An additional 5 are scheduled to training programs in the fall of 1970, all under sponsorship of the State Division of Vocational Rehabilitation and all scheduled to local rehabilitation facilities.

Institutional placement was the 1970 outcome of 5 of the 164 egressed students as of July, 1970. Four of these were in state institutions for the retarded, and one was in a juvenile correction facility.

An additional 5 former students are now deceased. Exacerbation of disability, neurological or systemic, was the cause of death in 3 cases. Two former students met accidental death.

The occupational outcomes of the remaining students in the "other" category are quite variable. Two of the girls are fully occupied as housewives, 5 of the other girls are substantial contributors of family work. In 2 instances, the former student releases the mother of the family for work outside the home. Two others function essentially as the family homemaker, in one instance because the mother has left the home and in the other because the mother is ill. The 5th of the family workers is engaged in the care of 2-year old twin siblings.

Five former students were "between jobs" at the time of the 1970 follow-up. All of them had had competitive jobs in the past and most can reasonably be expected to have jobs in the future.



One of the few community recreation opportunities in which most CSRC students can participate is bowling.

Four students had moved away from the project's service area and were unemployed or of unknown status. Two of them are capable of sheltered employment but live, in one case, 50 miles, and in the other, 60 miles from the nearest sheltered workshop in other

states.

The remaining 9 students in the "other" category are dependents in their family homes. One is a severe cardiac patient. One would be capable of sheltered employment or work activity but has no available public transportation. One former student has worked and is seeking employment so passively as to be unlikely to find it; another is supposedly waiting for service from DVR but does not keep his appointments. One of the dependent students faces the interesting prospect of traveling with her parents in an entertainment troupe.

1969 FOLLOW-UP IN DEPTH

Because the 1969 follow-up was conducted in some depth, it is possible to report statuses other than occupational for that group. Of the 92 students who had egressed before April, 1969, 7 were found to be living fully independently in the community and 7 others were semi-independent and living away from home. The first 7 were totally self supporting.

The interviewers attempted to judge the students' consumption of supervision in personal affairs and decisions. Forty-four appeared to be consuming the amount which is appropriate to their age, 31 appeared to consume more than normal supervision but less than does the average 10 year old, 31 of the 92 were visible to the community as "different" but were not considered to be socially troublesome, 5 had minor social troubles, one had more serious troubles, and 2 appeared to be in danger of being removed from the community to corrective or custodial placement.

Most of the former students did not participate within the community in the out-of-home recreational pattern which is normal to their age. Only 14 appeared to do so. An additional 29 used community recreation resources but to a limited extent, and 13 made use of special recreation which the community provides for the retarded. Ten appeared not to have any constructive use of recreation and spare time. Over half of the students appeared to be either satisfied with their recreational status or unquestioning of it, but 15 were dissatisfied and 14 more wished to do things which they could not do or did not do. Only one had a specific as to how to improve his recreational status. Two-thirds of the parents were either satisfied with the students' recreation or were resigned to it; 13 had suggestions for improvement. This poor utilization of leisure time on the part of egressed students has implications for improvement of the CSRC program.

The parents were also asked about their satisfaction with the students' occupational status and with social and community adjustment. On each of these points, two-thirds of the parents were satisfied with or reconciled to the present state of affairs and considered it to be appropriate.

The interviewers considered 64 of the 92 egressed to need only routine follow-up from CSRC in the near future. An additional 17 were thought likely to need contact in the future, but this appeared to be safely left to the initiative of the student and his family. In one case the interviewer believed that CSRC should initiate contact in the near future, and in one case it appeared that CSRC management of referral or arrangement of service by another agency was needed, and 2 appeared

to need resumption of direct CSRC service.

A conclusion from the follow-up findings was that a follow-up in this depth is useful for its feedback to the program and is needed by the egressed students in order to maximize their community adjustment. Resources could not be budgeted to in-depth follow-up in 1970 but consideration is being given to establishing a personal contact follow-up on an annual basis and for several years after the student leaves the direct service program.

FOLLOW-UP CORRELATES

The students who had egressed from the CSRC program by January of 1969 tended to under-represent the lower half of the student body's psychometric range. That is, the more able students tended to leave the program earlier.

Another tally of this phenomenon was made at the end of the project, omitting, this time, the few short-term and summer students who were not characteristic of the normal CSRC caseload. The Binet and Wechsler IQs and the intake Vineland Social Maturity Scale SQ were compared for egressed versus remaining regular students. The difference between the egressed and remaining students had disappeared with one exception: twice as many of the egressed students had Binet IQs below the CSRC median as were above the median. This unexpected finding may be a function of which students had been tested with the Binet. It very likely has something to do also with the expanding community opportunities for placement into non competitive occupations.

These tallies of the egression pattern at 2 points in time indicate that the more able students were among the earliest to leave but that this trend applied only during the first few years of the project. Egression appears to have stabilized at the end of the 5 years so that egression flow represents essentially the full range of student characteristics.

Because the in-depth 1969 follow-up was conducted before the egression flow had stabilized, its findings have to be interpreted rather cautiously.

With that caution borne in mind there still remains some findings of the 1969 follow-up which could give guidance to the CSRC program. (For details see CSRC Follow-up listed in Available Publications.) One interesting finding relates to the students' need for personal supervision before and after the CSRC experience. At the time of their entry into CSRC, 21 students had been left at home alone for short periods of time or in emergencies only or not at all. After egression, one-third of those same students were apparently consuming the amounts of personal supervision which is normal for their age, and another 10 were consuming less supervision than does the normal 10 year old.

Another finding of the 1969 follow-up was that the parents had, at the time of CSRC entrance, predicted the students' eventual occupational status with fairly good accuracy. Some of the parents' other opinions, such as whether the student was actually retarded, did not bear a consistent relationship to outcome. Some

other parent reports, notably the one response to whether the student does errands at home, do not discriminate because the student body was so uniform in that characteristic; 45 of the 46 parents responding to that question had said that the student did do home errands.

The community mobility of the student had been reported at intake and was also checked at the 1969 follow-up. Thirty-three of the students whose mobility at intake was restricted to their home and yard or to their own neighborhood were found at follow-up to be traveling independently by public bus.

The 1970 follow-up was not conducted in the same depth as had been done the previous year, but the occupational status and some other information were secured.

It might have been supposed that there would be some relationship between the students' occupational status and the length of time since he had last attended CSRC. No such relationship was found. This is consistent with the staff impression that adjustment to the job occurs within the first year.

The project has had no interest in predicting student outcome in the passive sense. Since there was no intent to screen out "inappropriate" students and since the purpose of the project was to improve the students' otherwise-prognosis, the psychometric data were gathered primarily to help develop individual student programs. As events turned out 2 of the kinds of IQ were related to occupational status at follow-up. They were the Binet IQ (N = 105, Chi Sq. = 7.33, P = .01) and the Wechsler Performance IQ (N = 81, Chi Sq. = 5.62, P = .02). On these 2 measures egressed students scoring above the median IQ for the group tended to be more often competitively employed than those with IQs below the median. The Wechsler Verbal IQ showed no such relationship to outcome. The Raven Progressive Matrices score and the Vineland SQ at intake were not related to outcome either. In any event, the overlap in the range of psychometrics for each of the outcome categories was so substantial as to make the measures useless for individual prediction. This constitutes no problem to a program such as CSRC, which has a sustained relationship with the student over a period of years and where the actual level of life performance can be observed. The IQ in such a situation is only one of many contributors to the understanding of the case and is not used strictly as a predictive device.

A curious outcome correlate was observed from time to time during the conduct of the project. This was reaction time of the student on a driver's training simulation device. In response to a red light the testee stamps on a brake pedal of the machine, familiarly known as the "foot stomp." Early in the project it had appeared that no student with a reaction time greater than .075 seconds was attaining competitive employment. As the sample expanded the significance of this observation could be checked. There were 54 among the 1970 egressed students who had recorded reaction times. Although in this sample there was a higher proportion of fast reaction times among the competitively employed than among those in other statuses the relationship is not very strong, and the odds are about one in 10 that it could be due to chance sampling.

SUMMARY

By the end of the project, a large enough number of students had egressed and enough of them had been in the community for a sufficient time so that some esti-

mate can be made of the program's impact upon their lives.

A substantial number attain competitive employment. Other occupation outside the home (sheltered employment, work activity, and adult daytime activity) represent a growing proportion of the student outcomes; depending upon the availability of

TABLE 3

JØBS HELD BY THE FØRMER CSRC STUDENTS WHØ WERE CØMPETITIVELY EMPLØYED, JULY 1970.

JØB	DØT CØDE	BØYS	GIRLS	TØTAL
GEN'L ØFFICE	219	0	2	2
MESSENGER	230	3	2	5
MAIL RØØM CLERK	231	2	0	2
STØCK GIRL	299	0	1	1
WAITRESS	311	0	2	2
SHØRT-ØRDER CØØK	314	2	0	2
CØØK'S HELPER	318	0	3	3
BUS BØY	318	14	2	16
DISH WASHER	318	10	10	20
MAID	323	0	1	1
NURSE'S AIDE	355	0	14	14
LAUNDRY LABØR	361	1	1	2
FACTØRY ASSEMBLY	706	1	7	8
MAINTENANCE	899	8	0	8
PRINTER'S HELPER	979	1	0	1
ØTHER LABØR		4	0	4
TØTAL		46	45	91

the service, this proportion may eventually reach one-third.

The proportion who need institutional placement has remained consistently low, under 5%.

For those who are not occupied outside their homes, a proportion which the staff estimates may sustain itself as high as one-third, the meaning of dependency requires a closer examination. Quite a few of the students at home appear to be occupied in ways that are productive, socially useful, and satisfying.

The CSRC experience has illustrated a hopeful trend in human service. It is that a facility which tries to value all optimal outcomes equally and which does not select its clients for their outcome potential can still report a sustantial record of achievement.

I see case management more as a position of specified responsibility than as a cluster of specified activities. Essentially, I see the case manager as the student's advocate, as the competent and expert person in the matter of securing services, as the coordinator of case activities which implement the diagnosis, as the diagnostician, and as the person who mobilizes both the student and the resources to deal with the student's needs. I see the case manager as the central point of case information and case action.

This is not quite the same as visualizing the case manager as some kind of boss or authoritarian manipulator. The case manager holds his purposes more firmly than he holds his methods, and it is necessary for him to work within that which it is possible to mobilize and to do. It is an advocating rather than administering role.

-from a CSRC position paper on case management.

The CSRC program has been carried out on the front line by two general classes of professionals: instructional and case management. The demonstration of case management services was one of the explicit charges to the project.

The Case Manager Chapter 5

The title of case manager has come into use in some rehabilitation circles during the past decade. In each setting the title denotes somewhat different functions. In this project the title is applied to the professional staff member who is responsible for providing continuity, central information, and the mobilization of resources on behalf of a limited number of students.

The role was the subject of considerable confusion during the first stages of the project's operation. The first description of staffing was ambiguous as to case management role. There was confusion among the functions of instructor, case manager, and social worker as the descriptions were initially approved. An addendum to the approved grant application helped to clarify the role. Further clarification resulted when the position of social worker was eliminated. This left the case manager as the one member of the front line professional staff whose work was not related to a scheduled classroom or program area.

The case manager at CSRC is charged with developing and mobilizing a program which will bring each student to his optimal level of functioning in the educational, social, and vocational realms. This kind of responsibility rather than any finite list of job duties defines the role and the activities of the case manager.

Diagnosis of the students' difficulties and the synthesis of all the diverse kinds of information into a single coherent picture is one of the case manager's prime responsibilities. Together with the rest of the staff, with the case manager serving as the formulator, this picture leads to a diagnosis and plan of educational-vocational action. The diagnosis is intended to cover all relevant areas of the student's functioning and draws upon background information, test material, observations of the staff, medical reports, reports from other agencies, contact with parents, and the arrangement of additional consultation when needed. The diagnosis is naturally not static in the sense of a picture assembled at a point in time, written down as a formal diagnosis, and then held inviolate. Instead, it undergoes addition, modification, and correction continuously while the student remains in CSRC serve. As this changing and expanding case understanding unfolds, the case manager is expected to maintain the central repository of case direction.

The case manager is usually thought of by the students as a counselor to whom the student may go with the full gamut of his needs. The counseling techniques which are used are varied. Some of the counseling is offered in an office, across the desk, and in the conventional, verbal manner. Some of the counseling consists of arranging life situations for the student to experience in the same way that a more verbal counselee might explore reality in a verbal-conceptual manner. For many of the CSRC students, words and ideas do not constitute the easy handle on

reality which they provide for most people. This direct use of reality as a counseling medium is thought of by the staff as "situational counseling."

Somewhat different is "ambulatory counseling." In its simpliest sense, this consists of going to where the student is encountering his problems and walking with him through the difficulty. The student may have done something which got him into trouble, such as picking up one of the tools of a workman and walking off with it. Talking about this and giving admonition seems not to be useful for the less verbal students. Further, there are some students whose verbal fluency is high but who fail to relate the content of their conversation with the events and the subjective experience. Ambulatory counseling in this kind of circumstance may take the form of bringing the student back to the place where he got the tool, having him go through the act all over again, and discussing it with him as he goes through the experience. The technique appears to be at least moderately successful with this kind of student.

Since each of the two Centers has a reasonably small campus, and since the case manager is on duty within the Center most of the time, less counseling is done over the desk and more counseling is done where the student is than would be true of most rehabilitation facilities or schools.

The selection, administration, and interpretation of psychological tests is another area of case management activity. Most of the case managers have been certified or eligible for certification as psychologists under Minnesota law. Standard psychological instruments have to be used cautiously and knowledgeably with a group of students who are as atypical as those of CSRC. This requires the case managers to be quite knowledgeable about the characteristics of tests, and many of the case managers have undertaken research studies concerned with the utility of testing at CSRC. The responsibility of the case manager is for assembling a useful battery of measurements on each of the students within his caseload and interpreting the findings for the benefit of non-psychologists on the staff. Though a psychologist is available to the case managers on a consulting basis, and though a psychometric technician has been engaged as a member of the staff during the last year of the project, much of the testing has been conducted personally by the case managers. The benefit of this is the direct observations and acquaintance with the students which cannot be attained from others' report.

The job placement and post-placement assistance to the student is a responsibility shared by the case manager. This is true of work training on the job or of sheltered or competitive job placement. The responsibility is shared with the placement specialist, particularly at the West Center. Vocational aides on the Center staff are also involved (see Chapter 8). However, the case manager carries the most central and enduring responsibility even though he may not be conducting most of the actions at some particular point in the case movement.

Establishing a relationship with the students' parents is one of the functions of the case manager. At the time of intake a formal interview is conducted, either at the Center or in the student's home. A structured history is obtained from the parents and also from the student. Liaison is established with the home school district, with the case manager traveling to the school and assembling information when necessary. After a referral has been received by CSRC, the follow-up and scheduling becomes the responsibility of the case manager. He also maintains the

report-back communication with the home school district, reporting formally at the end of each year and at other times as appears to be warranted. The central CSRC case record is initiated and maintained by the case manager in the course of his work with the student. At least yearly a parent conference is held.

As the student progresses through the program his case manager convenes and usually chairs case conferences as necessary. To a limited extent parents have been included in these conferences; the experience has been promising enough to cause CSRC to plan more extensive parent participation. Student scheduling, initially set at the time of entry on the basis of the best initial judgment of the case manager and supervisor of instruction, is revised as the result of case conference after the student has been in the program for a short period of time. Other revisions are made as they seem to be warranted. A student's problem or an opportunity for him to move to a job or other placement can also bring about a case conference. The reporting and summarizing of case conferences is the case manager's responsibility.

The case manager has no particular repertoire of services. He uses whatever services he can provide directly or mobilize on the part of someone else. The things which can be done within the CSRC program and by other CSRC staff are only a part of the case manager's armatarium. He is responsible for maintaining contact with all agencies active on the case and for securing service in the community if he sees a gap in the student's services. Like a good calvaryman, he is expected to forage in the community.

The project has found that a rather wide variety of individual professional backgrounds have been suited to the case manager role. Counseling psychology, rehabilitation counseling, school psychology, and special education have provided some of the professional backgrounds. Pervasive throughout all of these areas is a knowledge of habilitation techniques, including personal adjustment and work adjustment, a working knowledge of mental retardation ideology and treatment, administration and interpretation of psychometrics, vocational adjustment of the retarded, social case work, counseling, and special education programs for the retarded. There appears to be no one profession from which case managers need to be drawn. The role has been found to be quite tolerant of individual professional style. However, the job is quite demanding, and it is improbable that professional people drawn at random could function adequately. A sense of personal commitment, an attitude which values the personality of these students, a capability for working cooperatively and inspirationally with other staff, and personal initiative are required beyond any particular set of professional skills.

Each of the case managers is given overall responsibility for the outcome of perhaps 30 active students at any one time. He is expected to give focus to the individual program, to personalize it for each student, and to enable the student to participate in his own life and decisions as much as possible. He must draw together those who have the largest stakes in the student's life, including the student himself and his parents. His only scheduled activity is supervision of groups of students during the half-hour before home room in the morning. Being free of other scheduled activity he is expected to range across all aspects of the student's experience.

By focusing responsibility for a limited number of students upon one member of the professional staff and by defining that staff member's role in terms of outcome rather than procedure, the project has demonstrated a viable alternative to the traditional and diffuse team approach.

The Money Trainer makes the arithmetic of money into a concrete experience.

In a program which is itself designed to innovate a service where a service gap previously existed in the community and one which was charged with the rsponsibility for developing a different approach than that of conventional special education, a good many aspects of the program could be called innovative. This section is limited to a few innovations that are relatively free standing and subject to dissemination.

Program Innovations

Chapter 6

A few devices and procedures have been separately described. Among them are the money changer, telling time, the various program areas, and radio transmitted job instructions. They will be found listed among Available Publications.

THE MONEY TRAINER

To meet the students' need to understand the counting and handling of money, a device called the Money Trainer was developed. It is designed so that the student's learning can be somewhat individualized and requires a minimum of teacher time for instruction. The principle underlying this program is that of giving a concrete visualization to the value of coins so that the student can relate them to each other and learn how to count out purchase prices and change.

The Money Trainer enables the student, once he has learned how to recognize the various coins, count them without the possibility of making a mistake. He has only to avoid leaving physical spaces in his counting set-up as he works with the coins.

The Trainer consists of a number board, value forms, and a work book. The number board is flat with a raised border and contains the numbers one through 100 in squares in a 10 X 10 arrangement. The vertical rows, containing all of the multiples of 5 and 10 are indicated by color, and the numbers 25, 50, 75, and 100 are also designated by a separate color. The squares, each representing the value of one cent, measure approximately an inch on the side. The value forms are clear or lightly tinted plastic sheets, 3/16" thick with the actual coin recessed into the center of the sheet. The size of the value form covers as many squares as there are cents in the coin. This, among other things, makes it an evident fact that a dime is twice as "big" as a nickel.

The Money Trainer has been in use in both Centers starting in primitive form in the original Center in 1966. Final refinements were made during the last of the project years. Using the Money Trainer as a test, 18 students averaged a score of 15.5 on a pre-test (counting to about 40¢). After training, their average post-test score was 30.9.

Arrangements have been made for the manufacture of the Money Trainer device.

TELLING TIME

It appeared that many of the students in their learning history have been exposed

to too many things at once in the matter of telling time and, as a result, never really learned how to do the job well. A new program was therefore designed to teach this in a simpler manner.

Because of the limited academic skill of most of the CSRC students, the method could not require any reading ability on the part of the student. This required verbal directions. Further simplification included the omission of concepts such as "past the hour," or "to or before the hour." The times were all reduced to a single system of denotation in which "nine forty-five" is just what it says, not "15 minutes to 10," or "a quarter to 10." Once the basic concepts of time had been understood, it was felt, then the different verbal ways of telling time might be introduced.

A manual describing this process in detail has been prepared. (See Available Publications.)

RADIO TRANSMITTED JOB INSTRUCTION

Real work has many virtues as a training medium. However, the very reality of the work setting imposing some limits upon the kind of instruction which can be given, especially if public contact and moving about the work area are involved. A tutor cannot really tag along beside the worker under these circumstances. The instructional problem is compounded when the worker is mentally retarded and cannot easily rely upon verbal instruction in advance or upon learning from admonition a long time after an incident has occurred.

In the cafeteria training station provided to CSRC through the courtesy of the Glen Lake Sanatorium, bus boys have been trained in the elements of that job. In the 50' X 100' cafeteria dining area, it was physically impossible to maintain adequate instruction with 4 or 5 trainees moving about the room. The solution was to give instruction by radio.

The equipment ultimately selected after some experimentation uses a small FM transmitter powered by a 9 volt battery. The terminal units are six 9 transistor FM receivers. The total cost of the system was $140.20.

A number of benefits to this instructional system are apparent. Since all are on the same wave length each bus boy learns from the others' instructions. Work behavior gets immediate feedback. The instructor's presence is multiplied and spacially extended.

OTHER INNOVATIONS.

The reader may note other innovations in the descriptions of program area (Chapter 3 of this report).

The project has made use of some innovations devised by others such as the experiment with Social Perceptual Training. Perhaps not innovated but certainly atypical, was the scheduling of Montessori training as one of the students' several program periods during the day.

Various devices used in the CSRC program have stimulated interest in the local community. An example is a simple frame for knitting scarves and caps.

Mrs. Betsy Berglund is a volunteer who observed student behavior on the "calmness" dimension in connection with Social Perception Training. She discusses some of her related impressions:

BERGLUND: I observed the craft class one day, and there was a whole lot of excitement in the class. And the teacher said, "You know, I don't know what it is, but you are all kind of stirred up." She said, "Let's just talk a bit. I haven't talked to you for a long time, and I was sick, and let's talk about what you did on your Easter vacation." She said, "There's no sense in working today until we all get calmed down." And each one had a chance to tell what they did Easter vacation. And by the time they got finished, and she insisted that they all cooperate and give everybody a chance---well, when they finished, the place was just calm and relaxed, but she talked calm and relaxed too. And she said, "Well, now I think that we can go to work." That was beautiful. It was just done so nicely, because had she tried to work, that excitement or something---she wasn't sure what stirred them up---she wouldn't have been able to reach them. And they were so thrilled to have a chance to talk, and each one was able to tell with very little limitations---she had to shut some of them up very gently. But each one was given a chance to talk.

Q: I'm very impressed with her, you know.

BERGLUND: Well, she was so basic and helpful. And she went through a class one time that I thought was so interesting. It was learning how to thread a needle with a big piece of wool. It took the whole class the whole class period, but she said she wanted them to be able to sew at home and know how to do it. And what seemed to be the easiest thing in the world to hand them a bunch of needles already threaded and gone ahead on it, you know.

Q: I'm glad to hear about that particular incident. I know about the needle threading, but I hadn't heard about the other one. Interesting thing about Carol is that she doesn't have a teaching degree. She has a 2-year, junior college training as a child development technician.

BERGLUND: But she knows how to get through to those youngsters, and her whole atmosphere is so calm, and I'm really pleased with the results of the class and her approach to the youngsters. Of course, they're all great here. I mean every one of them. And I observed the young fellow who is here now, a very nice handling of a situation the other day. A girl came into class and she was 15 minutes late, and he said, "Why are you late?" And she immediately went up into the air. "You're mad at me because I'm late!" and she had told me previously that she was going to fight somebody in the hall. And she wanted him to say he was mad at her, and then she could go on like this, you know. "But really I'm not mad at you." She brought this up several times, and he said, "I'm not mad at you. You know, we do like to have you here doing your work, and if you want to tell me what it was that bothered you, fine." And she kept bringing it up, "You're mad at me, aren't you?" He said, "No, I'm not." He said, "But I will be if you don't get started to work right now." And she accepted this and got right to work.

Q: You know, he's a student here, from is it, Beloit or Antoich College.

BERGLUND: Well, it was so nicely handled, and he did get her down to work and back settled down, and she felt maybe she would cry about it. He went over later and talked to her. "You know, you are supposed to be to class on time, and you try to make it tomorrow." Very nicely done.

Program Support Activities

Chapter 7

The basic focus of RD-1810 was upon the demonstration of a service. Most of the resources and a large share of the interest, consequently, went into the curriculum and other direct services to the students. On the other hand, the project was also designed to investigate the extent of need for this kind of service, and the service required supportive activities worthy of report.

Research conducted in relation to the overall operation of the project has contributed to the factual information presented in some of the preceding chapters of this report. In addition, a number of more circumscribed research projects have been carried out by the CSRC staff. Some of them have been detailed in technical reports (see Available Publications).

POPULATION-IN-NEED STUDIES

Beginning as it did without much of an experience base, the project was charged, among other tasks, with making some kind of assessment of the need for this kind of program in the metropolitan area. Surveys of need have always been difficult to conduct, and the experience of this project has been no exception.

Initial plans called for the direct tally of students in the age range 10 to 20 who were not in public school classes and who might be candidates for the CSRC program. Many sources of information were tapped, particularly during the summer of 1966. Every school district was requested to report the children known to them, as were the major social agencies. In addition, names were sought from the State Departments of Welfare and Education, the independent daytime activity centers, private residential facilities, and the Minnesota Association for Retarded Children. The cooperation of the agencies and their personnel was excellent, and data were gathered on 3,699 retarded youngsters. Of these, 476 or about 13% were found from other sources and had not been on school lists. Surprisingly, Welfare contributed only 46 names that were not duplicated on other reporting lists. After a good deal of analysis, including the engagement of an additional staff person for a summer to bring the survey to a conclusion, it was determined that this approach was not generating much pertinent program information. The usual identifying information (name, address, age, educability level, county, school district) does not have much usable programming implications. A prohibitive amount of work would have been required to analyze these cases or even a sample of them in the depth required for program planning and independently of conducting a service program. The census approach was therefore abandoned.

To shed additional light on the nature of retarded students' needs, a small sample survey in some depth was conducted. Experience at a related project (RD-681, Minneapolis) had clarified the nature of retardation as found in urban public schools. To extend that clarification a small sample of 10 students was contributed to each of several rural school districts in the CSRC service area. Staff from CSRC conducted an educational-psychological assessment of these students as a dual service to the referring district and to the understanding of rural retardation which would be helpful to the CSRC staff. Generalization could only be made

with extreme caution from a sample of 10. However, the situations were found to be so similar that some suggestive conclusions at least could be drawn. It appears that in the CSRC service area, the nature of retardation is quite similar in the core city and in the rural areas. There is a strong sociological component to the causes of retardation. The distinction is that the rural educable retarded arise disproportionately in "one-farm slums" rather than coming from a single deteriorated sociological zone as is true in the major cities. Suburban retardation was not studied, and this small research was conducted primarily to provide backgrounding to the educational problems out of which the CSRC population is generated. A separate analysis of the CSRC population shows that they are not sociologically similar to the educable retarded in either urban or rural areas; the CSRC students come from the full sociological range and are not disproportionately drawn from areas of social deterioration. Unlike what is true of the educable retarded in general, the CSRC-type of retardation can strike anywhere.

Other possible ways of surveying the population-in-need were considered. Consultation was secured from what appeared to be the most thorough contemporary survey of the needs of retarded children, Project OEG-3-6-660798-1976 in Kansas City. The final conclusion of CSRC, after considering other alternatives, was that the most meaningful assessment of the population-in-need would be generated by the experience of the project itself.

A test, but here also being used as a perceptual training device.

Experience gradually showed that estimates made before the onset of the project had underestimated the amount of need. Evidently, a survey attempted in the abstract and dealing with the hypothetical provision of serice simply does not locate the people in need of service. It appears that it is necessary to set up a service and open the doors of a facility. When that happens, people "come out of the woodwork" and identify themselves. Retarded people, previously unknown to the school districts in which they live, have appeared in substantial numbers. The CSRC staff has dubbed this phenomenon "the woodwork effect."

The students served by this project constitute a coherent group whose needs were not being adequately met. This is a reasonably good definition of the nature of the population in need of service. Their characteristics have been explored in the conduct of the project. Analysis of the referral, enrollment, and egress patterns, aided by the woodwork effect, promises to yield the most valid survey of the amount of need in the community. Accordingly, the project shifted to this approach during its final years.

2

INSTRUMENTATION

Several instruments and measurement techniques were examined during the course of the project. The students in this program are atypical enough so that the utility of standard instruments cannot be taken for granted. Further, there was some interest in developing instruments which would have especial applicability to this kind of student.

One of the rating scales investigated at some length has to do with the likability of a student. A teacher rating instrument was devised and the results analyzed. The likability of a student was found to be related in a complex way to each of several other facts about him, such as his intelligence level. However, it was found that the likability of a student while in the program had very little relationship to his ultimate employment outcome. A side benefit of this study was a refinement of the rating technique.

Another study was carried out to determine whether or not significant differences could be observed between students when each was rated on a 5-point scale, dealing with such traits as grooming, promptness, and ability to follow directions. The results showed that teachers tended to disagree with each other when rating the same student but that there seemed to be no particular tendency for a teacher to assign high or low ratings in any particular trait. The ambiguous results of this study may be due to the students' conducting themselves in different ways in different settings since each teacher saw the student in a somewhat different situation. The literature, of course, carries a great deal of evidence that there are serious problems associated with rating scales and raters in general.

One of the more standard tests whose utility was investigated with this population is the 16 PF. Both the direct utility of the test and its concurrent validity with respect to other measures of the student were explored. Generally speaking, no significant value to this test was found in the peculiar population served by CSRC.

Production norms were developed in connection with the manipulative dexterity program area. This area, which physically resembles a sheltered workshop, is concerned with assessment and improvement of employability. Norms were developed in cooperation with the Opportunity Workshop, the Minneapolis Rehabilitation Center, and the Westminster Day Activity Center. They constitute one of the few local norms of this type which can be applied to quite seriously retarded adolescents and have found their way into the manuals of some other agencies.

A validation of the construct "employability" has been undertaken. The project data management consultant devised a program for converting an ordinal rating scale into an internal scale while subjecting the instrument to stringent analysis of inter-rater and intra-rater reliability. The hypothesis being tested is that there is a meaningful construct called employability, that it is made up of components such as dependability, quality of work, and ability to understand instructions, and that the constructs can be reliably attributed by raters who know the students. Since raw data such as IQ are notoriously poor predictors of employability in a retarded population, the further hypothesis of this study is that these ratings will

have more predictive value than do raw data. A parallel investigation of the same conceptual scheme has been conducted within the project by a graduate student in education (John Comstock, doctoral thesis, University of Minnesota, 1970). Preliminary findings of these related investigations indicate that the construct of employability functions pretty much as was hypothesized. A longer term follow-up will be needed to verify whether the construct is as useful as first appears. If staff ratings can be shown to carry higher predictive validity than do raw data, then a useful measurement tool will have been forged.

Research was conducted in connection with some of the project's program areas as is indicated in Chapter 3. See also Available Publications.

TESTING PROGRAM

Some of the significant findings of the CSRC testing program have been incorporated into the student descriptions of Chapter 3. In addition, a more technical report of student characteristics is available separately (see Available Publications).

At the beginning of the project, psychological testing was defined as one aspect of the case manager's role. In addition, the project engaged a psychological consultant who has many years' experience in rehabilitation counseling, school psychology, psychological disability assessment, and consulting work with various vocationally-oriented agencies. It may be noteworthy that neither the consultant nor the 7 state certified psychologists who have worked in various capacities on the CSRC staff are clinical psychologists. Their specialization is rather in rehabilitation, vocational or school psychology. This has necessarily had an influence upon the project's approach to psychological testing and test interpretation.

During the final year of the project a technician with a bachelor's degree in psychology was engaged to do much of the psychometrics. This increased the volume of feasible testing and enabled the application of certain measures for the first time to 100% of the school population.

Shifts in emphasis have occurred over the 5-year span of the project. Initially, effort was directed to assembling a battery of tests which could be appropriately applied to this atypical population. The battery was intended to cover intelligence, aptitude, and achievement. Tests of personality and interest were attempted to only a very limited extent. The battery was designed primarily to gain an understanding of the characteristics of the individual students so as to deal more adequately with each on an individual basis. A secondary goal was to enable a description of this novel population, but this goal was attained to a very limited extent. It appears that the nature of this population is such that they are difficult to describe meaningfully from psychometric data alone. The third, but subservient, goal of the testing program was to discover which tests might be useful with the less able retarded adolescent.

The project was able only to attain its first testing goal to a reasonable extent: the use of tests to aid in building and understanding of the individual student. This goal, of course, can only be claimed on the basis of staff opinion, supported

```
460   NEXT H
470   PRINT ""
480   PRINT TAB(20);
490   H=0
500   H=H+1
510   IF H>F THEN 64
520   A1=A[1,H]
530   A2=A[2,H]
540   IF A2>E THEN 6
550   PRINT A1;A2,
560   FØR J=1 TØ C
570   IF B[1,J]<A1 T
580   IF B[1,J]>A2 T
590   PRINT "*";
600   NEXT J
610   PRINT
620   GØTØ 500
630   X=0
640   X=0
650   Z=0
660   FØR J=1 TØ C
670   Y=B[1,J]
680   IF Y<D THEN 72
690   IF Y>E THEN 72
700   X=X+Y
710   Z=Z+1
720   NEXT J
730   PRINT ""
740   PRINT "THE MEA
750   M=X/Z
760   X=0
770   X=0
780   Z=0
790   FØR J=1 TØ C
800   Y=B[1,J]
810   IF Y<D THEN 86
820   IF Y>E THEN 86
830   X=X+Y^2
840   Z=Z+1
850   NEXT J
860   REM
870   PRINT "THE STA
```

Electronic data processing has helped to manage the information about students, and in other CSRC research.

by the evidence in student outcome that the program in general is effective.

A special problem, and one which has not been satisfactorily solved, has arisen in relation to testing achievement in the CSRC program. The standard tests of academic achievement are certainly appropriate within their range. A great many of the CSRC students, however, are entirely outside of the conventional range of academic achievement testing. The problem is much more severe in many of the other areas of life competence for which the CSRC program is designed. Standard instruments, especially instruments appropriate to this ability level, are virtually non-existent in some of the important achievement areas. The ability to constructively occupy one's leisure time is an example of this. The partial solution has been to depend upon very simple and direct reporting of the behavior of the student in the real life situation. This kind of reporting is useful for reaching an understanding of the case and for designing a constructive individual program. It is much more difficult to use this kind of report in a formal or abstract description of the total student population.

DATA MANAGEMENT

Throughout the life of the project considerable data were assembled on each of the students. The services of a consulting firm, Professional Data Services, Inc., were engaged. The individual giving most consultation, Richard McGuire, is experienced in the practice of rehabilitation as well as in the management of data.

In each case one IBM card has been devoted to identifying and status information. A second card tallied psychometric data. The contents of intake interviews with parents and students occupy the third card. A final card contains the results of the in-depth follow-up contact. In addition to these uniformly recorded data, other IBM cards were occupied with data used for limited periods of time.

From the four uniformly gathered cards, 167 variables on each student were tallied during the final year of the project. The tabulations will be found in a separate report (see

Available Publications).

An IBM card punch machine was maintained in the administrative office of CSRC. Through the good offices of the Educational Research and Development Council, the project had cost-free access to the computer installation of the University of Minnesota. Programs for the computer were written by the data management consultant, and a member of the clerical staff became proficient at data handling and has become competent in elementary programming. The sorting and listing (printing) functions of the University installation were most heavily used by CSRC with some difficulty being experienced in debugging the programs for computation. This was made more difficult by the change of University computer hardware during the fourth year of the project.

The West Center had 160 enrolled during its final year, and each student had home room assignment, locker assignment, and 6 program periods. Further, the daily program of a few students was changed each week in order to maintain the most appropriate program for each student. Some means had to be devised to keep everyone informed of the proper whereabouts of each student every hour of the day. A hand-written record or verbal communication would simply not manage this task. Consequently, the program of each student was recorded on an IBM punch card. A new card was prepared for each student program change. These cards were taken to the University each week or so and translated into printed lists. Alphabetic print-outs of all student programs were posted at various places in the Center, and each instructor was provided with a list of his students' programs, sorted according to class period. This relatively simple sorting and listing operation was the most frequently utilized aspect of the CSRC data management system, and the one which was most valuable in the eyes of the direct service staff.

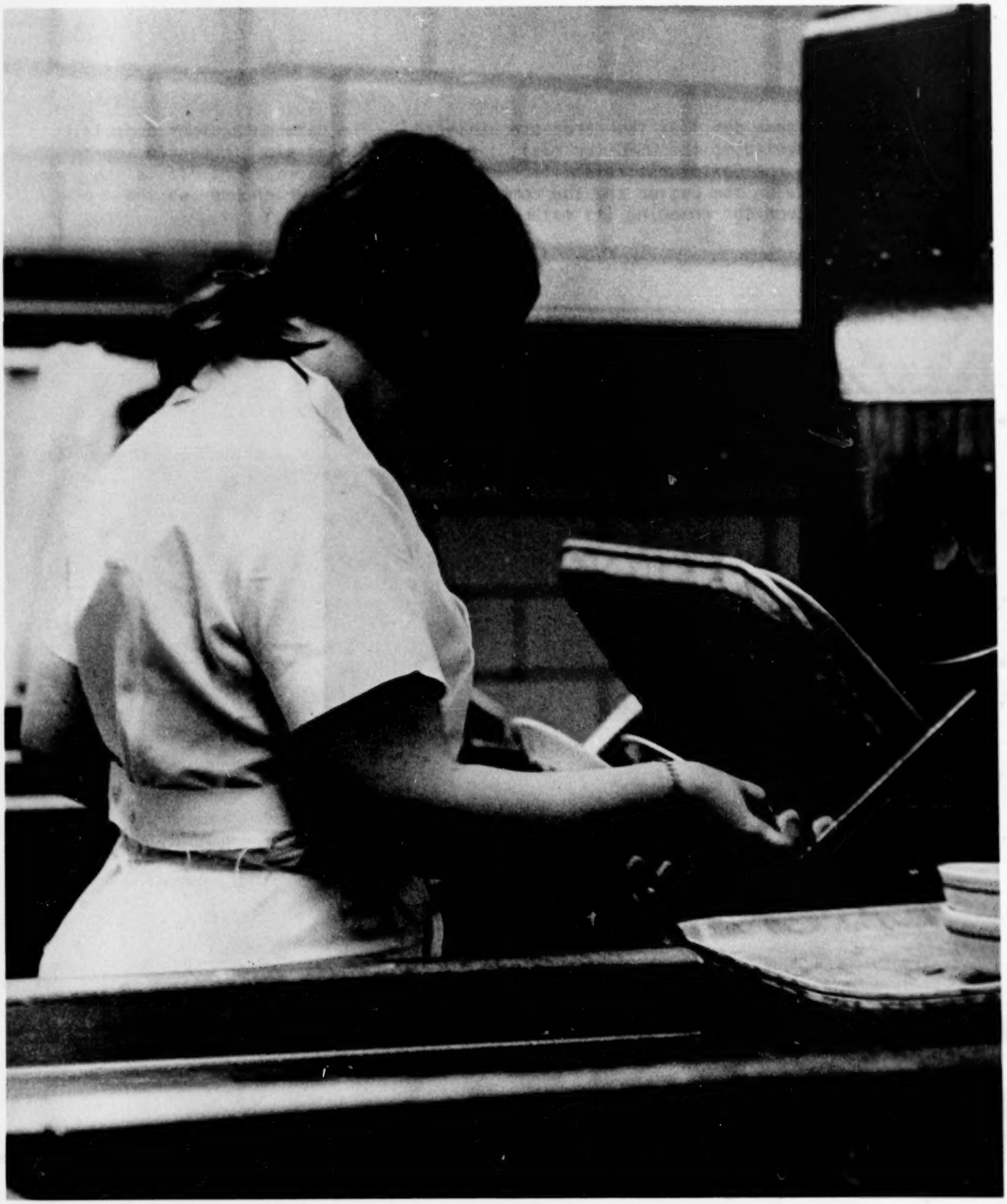
Though there were some changes, the basic data format for student characteristics was maintained throughout the life of the project. This enabled all the data to be processed uniformly during the final year. On the other hand, it did not enable major changes in the kind of data recorded. The final data were restricted almost entirely to the kinds of things which were foreseen to be useful when the project was first set up. The five years' experience of the project has led to some different interpretations of what data would be useful.

During the final year, because the new University computer installation was not fully compatible with the programs which had been written for CSRC data, all of the student characteristics were tabulated on a commercial computer installation.

Though the IBM card puncher has been located in the CSRC administrative office, the use of sorting, listing, and calculating facilities has required a round trip of 50 miles each time the University installation was used. Turn-around time for calculation has been generally two weeks between delivery of cards to the University and the retrieval of the print-out. The sorting and listing of student programs, of course, have not required turn-around time since the operation has been

done on the same day that the cards are delivered. The data management consultant has traveled to the CSRC for most of his work so that his geographic separation from the Center has seldom impeded the flow of information. It is the distance between the Center and the computer installation which has led the project to consider changing its method for handling data.

The CSRC school band -- small
but enthusiastic and appreciated.



The CSRC training program has employment as one of its more explicit goals.

Movement of CSRC students into employment is, as has been described earlier, a substantial proportion of the egression from the active program. A graded series of introduction to employment has been developed to bring about this kind of result. The series ranges: from basic employability training, through a work laboratory, through teaching of elements or the full range of job duties within the facility, through experience on the actual job under semi-sheltered circumstances, to placement on the community-based job and supervision until the student is established. Not all students go through the full series of steps, of course.

Steps to Employment Chapter 8

The entire CSRC program is intended to help build the general characteristics of a good employee. The basic characteristics are similar whether the work situation is competitive, sheltered, or simply time-occupying. The more competitive the job the more stringently these worker characteristics are required. General training and the simulated workshop called manipulative dexterity have been described in Chapter 3.

Job Skill Teaching

The project has provided training in the specific skills of three job areas: nurse's aide, food service, and maintenance. This training has been conducted primarily on a tutorial basis and is distinct from the on-the-job training which follows in some cases.

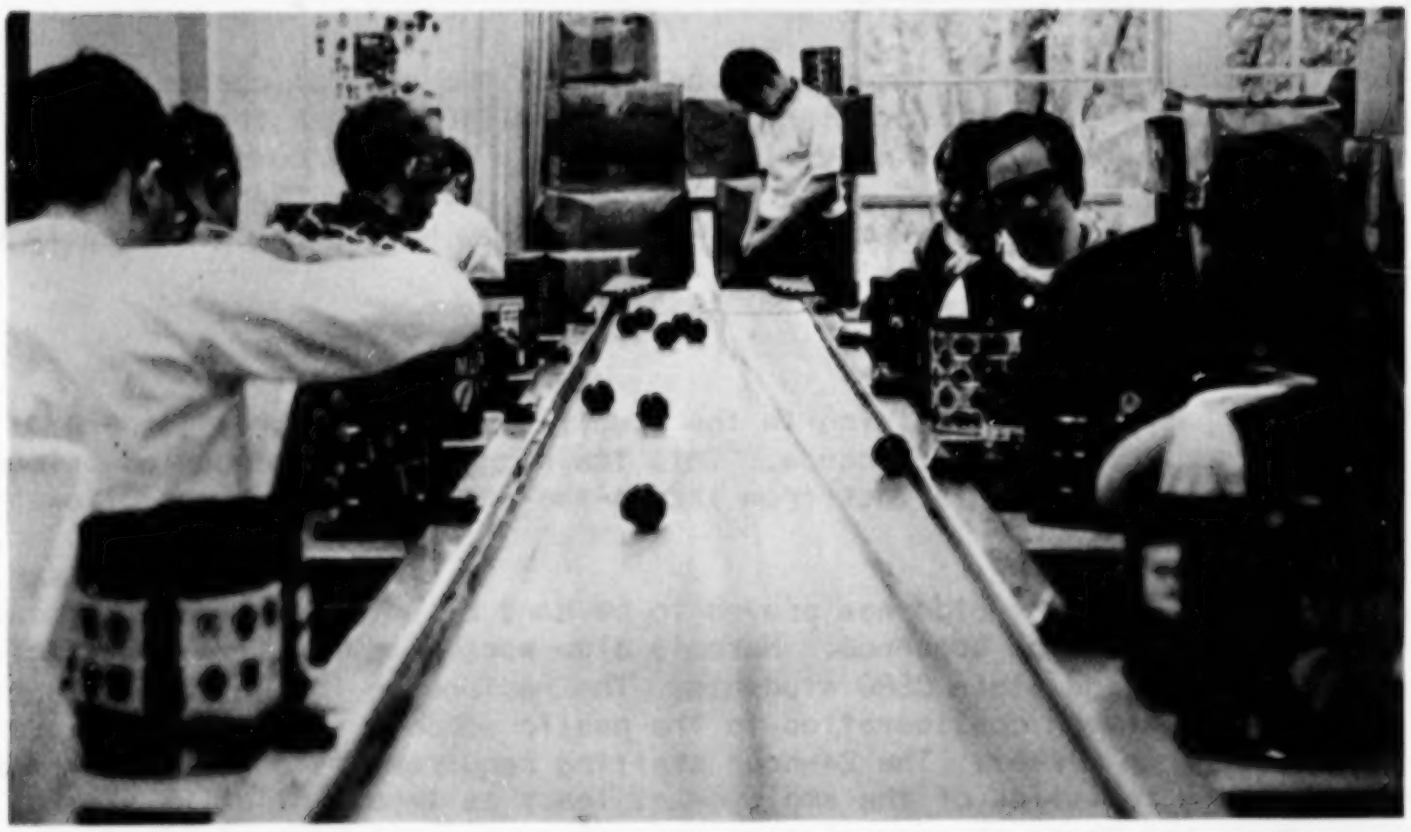
The work of the nurse's aide has proved to be conducive to a deliberate, controlled, and methodical training sequence. Nurse's aide work is attractive as a field in which to prepare and place CSRC students. The rest homes in the community have not previously given much consideration to the public schools as a labor pool, and this makes for an open market. The 24-hour staffing requirements of this work make the personal characteristics of the employee at least as important as is simple job proficiency, and these characteristics are not necessarily out of the reach of the retarded person. Finally, there seems to be a tendency for people in this kind of work to give enough notice before leaving so as to give CSRC an opportunity to make a non-emergency selection of students to be placed.

A training sequence has been developed within the project curriculum in which the elementary skills of the nurse's aide job can be taught before the student is given even a semi-sheltered placement on a real ward. A training manual was devised, and equipment was donated by the State Sanatorium Nursing Home complex which also donates the buildings to CSRC. Making beds, folding linen, and moving patients in and out of bed are practiced. Incidentally, the CSRC students are among the few nurse's aides in the community who come to the job already skilled in the use of a hydraulic patient lift, and this adds to their market value.

For those who show promise in this field of work, a semi-sheltered but real job placement is secured through the courtesy of the Sanatorium. The state maintains

a 300-bed geriatric nursing home on the campus and opportunity is given for a limited number of CSRC students to gain experience there. The project staff member who does the in-center training accompanies the student to this work experience station and provides tutorial and other support.

Those who are ready for movement out of the program into a competitive job in the field are then placed by the CSRC staff in one of the community's private nursing homes. This kind of placement opportunity has been developed over a period of several years, and the staff member who makes this placement then has a sustained contact with students who have gone into nurse's aide work. In some cases



The work laboratory (manipulative dexterity) teaches basic work habits and skills.

the student may continue to attend a limited number of classes at the Center during the first few weeks or months on the job, though most move directly into full-time employment. Because the East Center in St. Paul does not have the advantage of a nursing home on the campus, students in the Center are not as frequently able to get the sheltered experience.

In food service training the focus has been upon instilling in the trainee the more general qualities of attitudes, dependability, ability to get along with co-workers, concepts of quality and speed of work more than upon the imparting of specific skills. For that matter, the skills of food service work are minimal.

Again, training is given in the elements of the work within the project program itself. The West Center has a semi-sheltered experience opportunity in the cafeteria

of the Sanatorium. Ten to 12 CSRC students at a time are able to gain experience as bus boy, cook's helper, or dishwasher. An ingenious system for giving the bus boys instructions by radio has been devised (see Available Publications). The East Center, again lacking a job experience station in food service on its own campus, makes use of stations at the University of Minnesota Farm Campus in St. Paul. These semi-sheltered experience placements do not completely duplicate all of the elements of competitive work, but they allow the trainee to build a basis of experience that is not very different from competitive employment.

Placement into competitive food service work usually is the result of solicitation of employers by CSRC staff. Initially, this is a selling activity. Employers who take on students then usually take the initiative of contacting the school when new openings occur. Most food service businesses have high employee turnover and generally have no prior notice when an employee resigns. They often first know of an opening on the morning when an employee fails to show up. The CSRCs have developed a capability for responding to this kind of emergency appeal as rapidly as possible. There's usually available a pool of CSRC students who could make this transition even if only on a short-term basis. Clearance is secured from parents by telephone and the student is often taken directly to the job, with whatever transportation training may be necessary given after he starts.

Familiarity with the hydraulic patient lift makes CSRC girls more valuable as nurse's aides.

In nurse's aide and food service work, a corps of employers has been developed with whom the project maintains on-going contact. Many of these employers are willing to accept students for on-the-job training as well as for employment as such. The State Vocational Rehabilitation agency has been highly cooperative in providing on-the-job training contracts when they are needed.

Some of the other job skill training offered by the project, an example being maintenance work, is less completely integrated into a series beginning with basics and ending in placement on that particular job. In maintenance training, a rotating student work crew is usually maintained. A college student aide may be in charge of such a work crew, engaged in the normal maintenance of the Centers' buildings. The instruction is tutorial although some formal sequences have been worked out. At other times students act as assistants to the maintenance man on the CSRC staff. Job placement in this field, for those who go into it competitively, is adventitious and opportunistic. Here, also, on-the-job training is sometimes

arranged.

Youngsters who have made the transition from an in-center program to competitive employment have, in most cases, not completely severed their relationship to the project. In every case the school remains involved in follow-up, continued employee-employer contact, and if needed, assistance in up-grading the youngster to a more demanding job situation. Many of the employers are on a regular "beat" of CSRC staff, and contact is maintained in that way. Many of the students on initial job placement continue to attend the Center for a part of the day. Often, this attendance is during the first hour of the morning. Though this kind of an arrangement usually calls for extensive travel by the student (the West Center is 20 miles from downtown Minneapolis by public bus and the East Center is located within a service area of substantial size also), it appears that the investment of travel time is warranted by the benefits received by the student in his continued Center attendance for a time.

A sheltered but real job training station provided by the host, Glen Lake State Sanatorium.

The two Centers have developed somewhat different patterns of job placement, and the pattern of the West Center is undergoing change at the time of this report. Procedures which were appropriate to a small program enrolling less than 100 students become difficult to apply to larger programs. Initially, before the East Center was established, virtually all job placement was arranged by a single staff member who also carries the administrative responsibility for the instructional program. With the physical separation of the two Centers the job placement role in the East Center was assumed by the case managers with some assistance from the counselors in the State Division of Vocational Rehabilitation. The placement pattern in the West has begun to include more direct job placement activity on the part of the case managers. The employer contacts, established by the initial placement specialist, however, remain invaluable.

The CSRC students who have been placed on competitive jobs tend to be more stable than are their non retarded co-workers, according to staff impressions. To this stability is attributed some of the outstanding cooperation demonstrated by employers. The first month appears to be the critical period for adjustment to employment. If the student survives that time he tends to remain on the job for a substantial period. Some have remained on the initial job placement since 1966. However, the initial placement from CSRC is not intended to necessarily be a ter-

minal placement. Frequently, in the course of follow-up contacts, help is given job up-grading or in placement on another job. In a few cases the student has returned to full-time Center attendance and then gone on to another placement.

Placement into sheltered employment follows a different pattern as does placement into work activity and adult daytime activity. Most sheltered work placements are made as the result of the State Vocational Rehabilitation Agency's provision of a time of training in the workshop where the student becomes employed. Since the CSRC service area is geographically large, transportation of the former student to sheltered employment becomes a constraint. The employee's income in a sheltered workshop is too limited to warrant an expensive means of travel between home and shop. Further, there is very limited sheltered work opportunity in the eastern half of the metropolitan area.

The situation in work activity and in day activity is similar with regard to the transportation constraint, though the problem is more difficult because of the negligible income from this kind of occupation. Former students of the West Center have a special advantage in this regard since the Opportunity Workshop, Inc. established a branch on the Sanatorium campus. This program, licensed by the state for adult daytime activity and by the Federal Wages and Hours unit as a work activity center, is able to accept former students who can use the same transportation pattern which allowed them to attend CSRC. At the end of the 1969-70 school year, 5 former students were in the program of the Opportunity Workshop branch.

Another job training station, in the host's geriatric nursing home.

The Board of Directors of the Educational Research and Development Council, meeting at the West Center in the final days of Project RD-1810-G, reviews the achievements of CSRC.

Students prepare a lunch for the Board of ERDC as part of their home economics training.

The implications of CSRC are those of a demonstration project. They relate to matters of administration, inter-district operation, identity and needs of students, program design, and rehabilitation goals.

Implications of RD-1810-G Chapter 9

Project RD-1810-G was charged mainly with demonstration and development. As has been indicated, the project was a successful demonstration. The implications or findings which follow take this success as a datum, and some of the conclusions here presented are supported only upon the evidence that "this worked for CSRC." Application to other settings is necessarily conditional.

The student body of CSRC was brought together simply because they were the people for whom a service did not previously exist. Their definition was therefore a process definition, rather than a definition in advance of characteristics whereby they would be selected. **"Less able" retarded adolescents, operationally defined as those too handicapped to be adequately served in their home school districts, make up a coherent group for whom an effective school-rehabilitation program can be devised.**

Unsuccessful attempts were made to conduct some sort of census which would tell who needed service. Not only were the attempts unsuccessful, but they led to an under-estimate of the need. Once a service became the payoff for identification and referral, additional students were identified. **When a service is provided in fact, the people who need it begin to appear (the "woodwork effect"); more of them appear than would be predicted by a census of need carried out in the abstract.**

The administrative machinery under which RD-1810-G was operated was not originally designed to operate a service program. The Educational Research and Development Council had to take a large step of faith, and cooperating and regulatory agencies had to display equal faith, in order for the project to function. It did, in fact, function effectively. **A perceived service need, a fair degree of mutual trust among the service providers, and integration into the whole local spectrum of service can bring about a successful program even if an organizational structure is theoretically inadequate.**

There was a secondary gain to the grantee. Though the ERDC has been responsible for calling other service entities into being (example: a data processing joint board) its experience with CSRC was unique in that a program was actually operated. There is evidence that one reason for school district cooperation in ERDC was that a real service was being provided. **The provision of a service gives focus and vitality to an area-wide or inter-district organization.**

The average commuting distance for CSRC students was between 15 and 20 miles from either Center. **If the students being served are unusual enough to require a special facility, the economical service radius in an urban area is at least 20 and perhaps**

30 miles.

The Twin Cities metropolitan area has a general population of 1.8 million. The project's experience indicates that 50 to 75 students is the minimum size for effective program diversification. **An inter-district public school-rehabilitation program for "less able" retarded adolescents, capable of offering a diversified program, probably requires a general population base of 500,000 or more.**

The students sent to CSRC had their transportation arranged by their own school district as a part of the transportation system which each district has had to develop. For a facility as small as CSRC to set up a 7-county transportation system of its own would have been prohibitively complicated. To a less spectacular extent, the same complication would apply to many administrative housekeeping functions. The host district (Hopkins) provided many services. **A special education facility, as a part of the public educational system, may receive rather than duplicate many items of administrative overhead; pupil transportation and the management of state aids are examples.**

The curriculum options of CSRC, as shown in Chapter 3 and elsewhere in this report, are much more diversified than would be warranted in a school district with perhaps 5 to 20 students of this kind. **A public school special education facility, provided that it is large enough, can offer a well-rounded and wide-ranging set of program options to the individual student.**

The structure and operation of the CSRC program has arisen out of the need as it emerged, out of a fairly clear set of goals, out of an administrative stance which accepted diversity, and out of the individual talents of its staff. The last two contributing factors are by no means the only ways to set up a program, but they worked well for CSRC. **A deliberately open-ended set of job descriptions, with staff selected for diversity and with minimum stress upon paper credentials, can lead to differential staffing and an effective program.**

The project gave explicit thought to the question of intake criteria. The decision was that no criteria should be added, once the referring school district had determined that CSRC referral was the best way to meet its obligation to the student. This forced the CSRC program to become whatever might be needed. **Program development forced by a no-reject intake policy, and program design which follows as much as dictates staff selection, can lead to the provision of effective service.**

One charge to the project was to demonstrate case management services. Front-line CSRC staff therefore consisted of only two kinds of professional personnel: instructors and case managers. The relationship throughout the staff was one of equality. **Case management, with one staff member bearing responsibility for mobilizing all resources on behalf of the student while having no administrative authority, is a viable alternative to the more diffuse "team approach."**

A student comes to CSRC, as he does to any other public education service, because he is the responsibility of public education. Whether he lacks high potential for any one valued outcome, such as competitive employment, is immaterial to the ques-

tion of whether he should get service. He will have an outcome, and that outcome is as valuable to his life as any other would be to someone else. The value system of the project staff had to recognize that. Further, all possibilities had to be considered, including "successful unemployment." The best outcome for each student constitutes his rehabilitation potential. **A public school-rehabilitation program can and must address itself to a broad range of goals for its students, and is well advised to value the whole range.**

Though there are limits to what school-rehabilitation technology can accomplish, the success of CSRC students has been substantial even by conventional rehabilitation standards. **A facility that tries to value equally all outcomes which are optimum for the individual client, and that does not select clients on the basis of their outcome potential, may still show a creditable record of client achievement.**

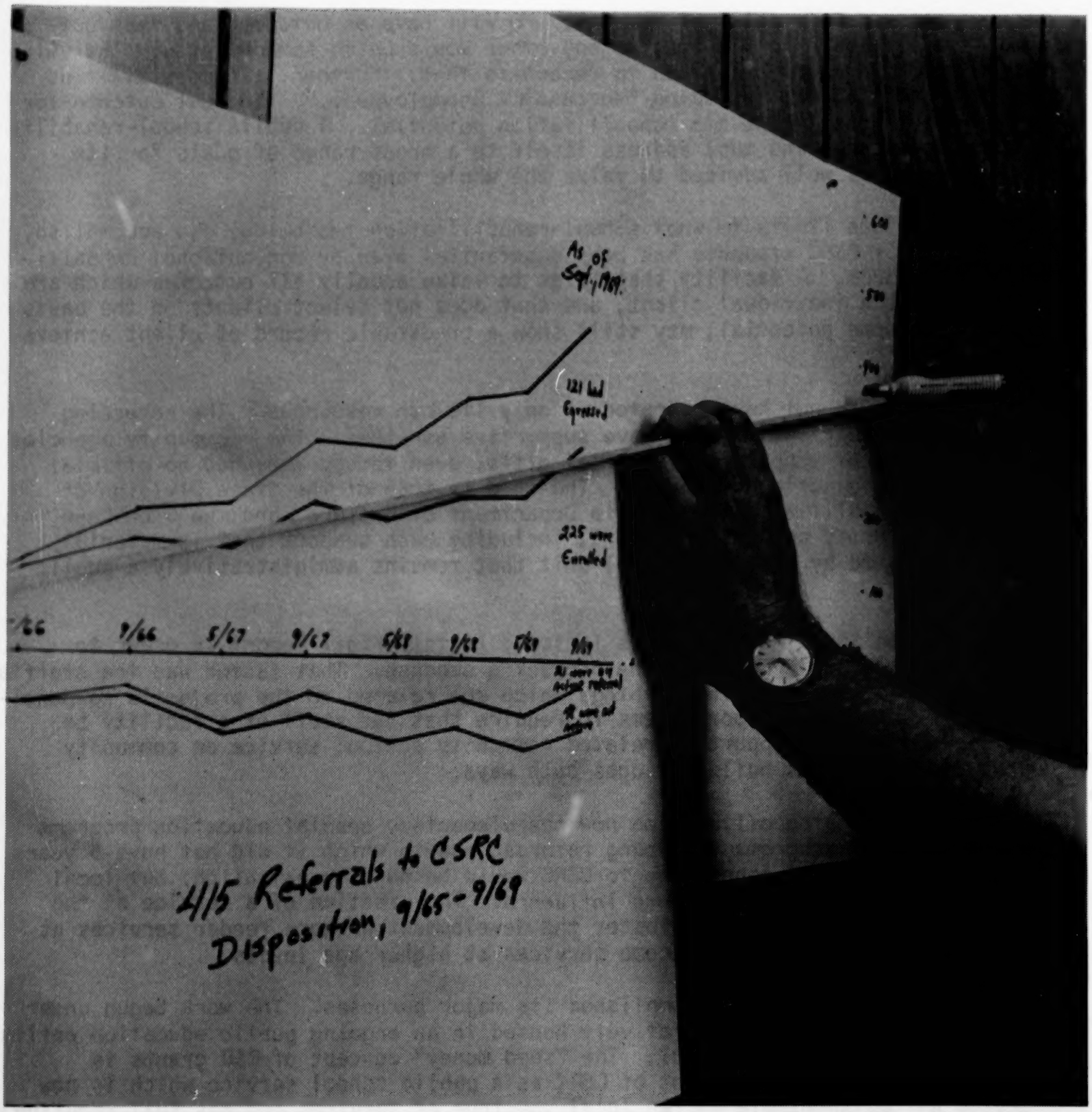
The project could not have operated on only its own resources. The referring schools paid their own way and gave supportive services. The community agencies gave strong moral support and material gifts, even though they had no official share in the project's governance. The same is true of the State Division of Vocational Rehabilitation, the State Department of Welfare, and the Glen Lake Sanatorium. **Broad community support, including much support that is material, can be generated by a public school unit that remains administratively a public school.**

The section on Staff Activities is included in this Final Report in order to illustrate a factor crucial to the project's success. That factor was the staff's sustained involvement in those things which are related to the project's responsibilities. **Community support seems to require that the staff of a facility be equally involved in supporting related community action; service on community boards and committees builds bridges both ways.**

The Twin Cities metropolitan area now has elementary special education programs and occupational programs for young retarded adults which it did not have 5 years ago. A direct causal connection to CSRC would be hard to establish, but local opinion is that CSRC has been one influence. **The creation of a service at the adolescent age level seems to foster the development of more feeder services at lower age levels, and more outcome services at higher age levels.**

Altogether, RD-1810-G has accomplished its major purposes. The work begun under the project has been administratively housed in an ongoing public education entity, Special School District No. 287. **The "seed money" concept of R&D grants is vindicated by the establishment of CSRC as a public school service which is now accepted as indispensable to the local spectrum of services and has full, routine local funding.**

The multitude of other implications arising out of RD-1810-G will be left to discussion in arenas other than this Final Report.



Anticipating the future of an innovative program is difficult. In the short run, size of demand may be extrapolated from present trends.

The Cooperative School-Rehabilitation Centers end their 5 years of project status with formal transfer to total local fund initiative and responsibility. They have become a unit of Special School District No. 287 and expect to continue service to the same type of student body and to the same geographic service area. What began as the expression of local concern and was implemented by project funds has now been established as an integral part of the local service spectrum.

The Future of CSRC

Chapter 10

One of the uncertain elements in the details of the CSRC future has to do with the establishment of regional educational authority by the State Department of Education. A system has been proposed entitled Minnesota Educational Service Areas (MESA) under which the state would be divided into 11 regions. The 7-county metropolitan area serviced by the CSRCs would constitute one of those regions. The outcome of the regional planning will certainly affect the administrative future of the CSRCs, but in ways which are likely to preserve the central concepts of the service.

Flexibility and the ability to introduce innovations prior to proving their value absolutely have been among the major determinants of CSRC success. Accordingly, the accepted intent of the CSRC future is to retain this flexibility. Maintaining flexibility will be more difficult in an established program. Difficulty, however, is no reason for abandoning the ideal or for accepting unnecessary rigidities.

A new 5-year plan has been proposed as a vehicle for maintaining the progressive and innovative character of the Centers. The working out of such a plan could mobilize the acceptance of further changes as they are required. The history of education is replete with illustrations of what happens when a program is considered to have attained its goals. Procedures then become reified, paper work multiplies, and efficiency suffers while expanded resources are poured into the defense of details. It becomes heretical to question the ways things are done, and proposals for innovation get verbal assent but subtle barriers are placed before those who would move forward. Under pressure from without there is acceptance of those changes which are either too discordant with the fundamental purposes of the organization to be integrated or are too poorly supported to be successful. The appearance of vitality is maintained for a time through such devices as the use of grant funds for innovation while the innovation is effectively isolated from the mainstream of the organization's task. Creative staff leave, having greener pastures elsewhere, and the selection process for new staff begins to favor the docile and the credential-bound. There is no intention that this process shall happen to the CSRCs.

The Advisory Board has been continued and is viewed as one of the primary vehicle for maintaining the forward movement of the service. This Board, representing the entire area served, can give both impetus and balance to planning the future.

The caseload focus will be maintained. Starting out to fill a clear gap in the spectrum of services to the retarded, the project demonstrated that there was indeed

a coherent group of people who needed this kind of service. The referral process, with its emphasis upon accepting those students who are viewed by their responsible local school districts as proper candidates, generated the caseload. It has been found to be a group for whom services can be designed to good effect. In the future this same procedure (accepting those needing service rather than defining any set of indexes by which to select or reject students) will be maintained. This forces program development in that the program must continually become what is needed rather than settling into procedures for which an "appropriate" caseload is to be solicited. The service gap was originally created by the screening

New quarters for the West Center in 1971, building provided through the courtesy of the State Department of Welfare and remodeling to be done under a grant from the State Division of Vocational Rehabilitation.

out of students from programs inappropriate to them; a new service gap would be created if CSRC were to adopt the same stance, regardless of how appropriate it may be for other service organizations.

Larger enrollment will have to be accommodated in both Centers. Experience has taught the need for caution in longer-term projection, but an enrollment of 250 in the West Center and 125 in the East Center is probable by the end of 1971-72. This assumes no expansion in the type or age of students.

A downward extension of the age range has been considered and will be further explored. Extension by more than 2 years, lower than age 12, would carry with it some major program changes.

The provision of additional kinds of special education services, such as a free-standing educational-vocational diagnosis, would require a different major program change. The same is true of 2 other services which have been discussed, elementary-level programs for the less able retarded and pre-school services. These possibilities will be approached with cautious but open mind.

Follow-up and its feedback are planned for strengthening. A CSRC student does not go out of existence the day that he ceases attendance. On the contrary, on that day he begins to furnish information about the effectiveness of the program and where it may need strengthening. The intent is to budget resources so that a personal contact can be made with former students at least annually. The in-depth follow-up interview, piloted in 1969, can give effective feedback regarding the results of the service program.

The data system devised for the project in 1966 was appropriate to its time and technology but is in need of change. A less static approach to acquiring and using data is needed. Accordingly, the Centers are moving closer to a real-time management of data. A computer terminal is being installed in the administrative offices. This terminal, operating by teletype, is intended for use by not only the research personnel but also by the administrative generalists. The computer language used (BASIC) allows the user to communicate in ordinary English. The programmer finds his language to also be akin to English. The terminal will access to the time share computer facilities of TIES (Total Educational Information Systems), an educational data management service whose formation was catalyzed by the Educational Research and Development Council, the sponsor of this project. The major intent of this change in data hardware is to enable the CSRCs to have a stronger and more immediate feedback so as to facilitate and improve service.

The project has been viewed primarily as demonstration rather than research. It has demonstrated the effectiveness of its program and has been accepted as part of the local educational service structure. Research projects have been done primarily in the course of providing service. This emphasis will continue. Service staff has shown an increasing interest in conducting studies within their areas of interest, and the Centers intend to encourage this type of research.

The program or curriculum of the Centers will continue to undergo change. For example, a general science course appropriate to less able retarded students will be offered at the West Center in 1970-71. Newly acquired staff will be encouraged to exploit their individual interests and capabilities.

The infusion of new blood provided by the use of student aides has proved invaluable. This will continue. Arrangements have also been made for expansion of the limited internship opportunities in rehabilitation and special education which the CSRCs have provided.

Project staff have been active in community affairs (see Staff Activities), and some of the community cooperation can be attributed to that fact. Continued community involvement is anticipated.

The utilization of CSRC demonstration and research will be a matter of concern and action. It is all very well and good for a program to demonstrate its utility and secure a place in the community service spectrum; however, its utility ought not to end there. This report and the more detailed reports which can be secured from CSRC constitute one kind of effort to promote utilization. Continued participation in conferences and publications will naturally be another effort. Means will be sought to promote visitation by persons and groups interested in establishing similar programs.

Q: What would cut off our capability to continue development?

MUELLER: It seems to me that in the continued governance of this, we are still going to have to operate somewhat separate from the traditional school district organization. I think that the vocational school district probably wants the same kind of flexibility that this project has had. I think they need that kind of flexibility. You will still have to be responsible. There will be an accounting at some point in time of whether you have done your job, but you've got a little more time, a little more freedom to do it. The accounting won't be a month by month thing. I think that this particular move is the best possible alternative to the project status. I supported this kind of move to keep that developmental flavor to the whole thing. That's going to be hard to do. It is much easier just to sit on a program and rot.

Q: We will now be with the Hennepin County Joint Board. This will be the first really operating inter-district organization in Minnesota constituted as an operating entity.

MUELLER: It's the first one, the first multi-district one, to actually have definition as a school district. It's not the first joint board but the first that would actually operate with kids. You couldn't use the usual area vocational technical school as a model because that is operated as a host district. It's not quite the same, you know. I think that tying this in with a vocationally oriented program will not be bad. The program direction of CSRC is more akin to that in terms of the original design. The big emphasis is always on egress.

Q: That gives it tangibility, doesn't it?

MUELLER: I think that's the direction of the vocational people, so I don't think that there is anything inconsistent. I am not sure whether this is a plus or a minus thing, but it's going to have a more stable financial base than if the program had been turned over to a single district or to 2 or 3 districts or if it continued as part of ERDC. Now, I think that what ought to be done, just frankly, would be for someone to develop the next 5-year plan.

Q: You have to remember that that's almost contradictory to the way we have operated. We have evolved rather than developing according to a fixed plan.

MUELLER: Well, that's true but maybe you should plan the next 5 years' evolution, lay out a few general things, preserve the research and development character; don't call this simply an ongoing program. Talk about the CSRC 1970-75 evolution. I think that's valuable. I don't see how you can do without it. I think you'll get the capability through this Vocational Joint Board to provide the freedom to handle this.

Staff Activities

This partial listing of staff activities is presented in order to illustrate the project's involvement with community educational and rehabilitation affairs. CSRC operated in a matrix of other services, and its effectiveness is tied to the nature and availability of those other services. By influencing the course of related service structures and technologies, these staff activities have contributed to the project's effectiveness.

ORGANIZATIONAL

The first number in parentheses following each citation indicates the number of CSRC staff who have served in that capacity. The second number indicates the aggregate number of years' service.

Board of Directors, Minnesota Rehabilitation Association (3;3)

Board of Directors, Minnesota Rehabilitation Counseling Association (2;3)

Board of Directors, Minneapolis Association for Retarded Children (1;1)

Board of Directors, Daytime Activity and Training Center Council of Hennepin County (1;2)

Boards of Directors, (various) daytime activity centers (5;8)

Board of Directors, Minnesota Association of Rehabilitation Facilities (1;1)

Member, East Metro Day Activity Council (1;1)

Member, State Advisory Committee on Discharge Standards for MR Institutions (1;2)

Member, Advisory Board, Owatonna State School (1;2)

Member, Advisory Committee on School Psychology, State Department of Education (1;1)

Member, Education and Youth Incentives Committee, Minneapolis Urban League (1;2)

Member, Title VI Advisory and Review Committee, State Department Education (1;2)

Member, Health Committee, Citizens' League of metropolitan area (1;1)

Member, Curriculum Advisory Committee, Rehabilitation Training, Stout State University (1;3)

Member, Advisory Committee on Vocational Education, Minneapolis Public Schools (1;2)

Editor, Vocational Evaluation and Work Adjustment Bulletin (1;3)

Memberships have been maintained by CSRC staff in a wide range of professional associations. Fields represented include: *rehabilitation, psychology and*

counseling, administration of special education, university professors, music therapy, mental retardation, and physical education.

TEACHING AND RELATED

Several of the staff have helped to conduct in-service training institutes and short courses. The project has been frequently visited by groups of students in special education, nursing, and rehabilitation. Staff have carried out the following formal responsibilities:

Instructor, Secondary Education of the Retarded, University of Minnesota

Instructor, Sociology of Mental Illness, Augsburg College

Facilitator, encounter groups, several sponsored by public school districts

Some of the lectures or speeches delivered by staff will be found listed among Available Publications.

CONSULTING

CSRC staff have been engaged as consultants on an individual basis. This consulting activity, though conducted apart from the project as such, has transmitted viewpoints and knowledge in both directions.

Consulting Editor, Comprehensive Statewide Planning for Vocational Rehabilitation (State Planning Agency)

Chief Consultant, Study of Educational Programs in State Institutions for the Retarded (Minnesota National Laboratories)

Consultant, Minnesota Learning Center (Educational Management Services)

Psychological Consultant (local rehabilitation facilities)

Available Publications

The publications, reports, and papers listed here may be obtained from the Cooperative School-Rehabilitation Centers, 6025 Eden Prairie Road, Minnetonka, Minnesota 55343.

REPORTS

The following, some of which are the statistical and technical analyses upon which this Final Report was based, will be furnished without charge while they remain in stock.

CSRC Student Characteristics. *Tabulation of case historic, psychometric, and behavioral variables.*

CSRC Student Follow-Up. *Tabulation from 1969 and 1970 follow-up data on egressed students.*

Curriculum Experiment: Montessori. *Report of rationale, procedures, and post-test on 1969-70 Montessori program at CSRC.*

Curriculum Experiment: Social Perceptual Training. *Report of rationale, procedures, and post-test on 1969-70 Social Perceptual Training at CSRC.*

Employability: A Construct Validation. *Report of the relationships among case data and the ratings of employability, dependability, and quality of work.*

The Money Trainer. *Describes a method and apparatus devised to teach counting money and making change.*

Special Education in the Twin Cities Metropolitan Area: Benchmark 1966-67. *Describes resources, student load, and perceived program needs in special education in 47 school districts in the 7-county CSRC service area.*

Student Yearbook. *The yearbooks of the two Centers.*

LIBRARY

These selected documents are available on loan from the CSRC library. Some of them are working papers not in format suitable for publication. Requests should be directed to "CSRC Librarian" at the above address.

After CSRC - What? *A description of possible occupational outcomes, written for parents.*

Radio-Transmitted Job Instruction. *Reprint. Describes a method for remote instruction of cafeteria trainees.*

CSRC Library List. *A topical listing of books, materials, and project reports in the fields of retardation, special education, and rehabilitation.*

CSRC Program Areas. *Each of the 1969-70 program areas described in terms of goals, procedures and activities, kind of students served, judged goal*

attainment, and recommendations for improvement.

Telling Time. *Describes a method of teaching the telling of time.*

Training Manual, Nurse's Aide. *A student manual of job procedures.*

Census of the Handicapped. *A working paper on methods for developing an information base for planning special education service.*

Commentary on Disability Estimates. *Critique of a 5-state survey of the handicapped, with special reference to the retarded.*

Policy Review, CSRC Egression. *A mid-Project analysis of policy on egression, presenting alternatives and reporting the decision made at that time.*

Referral Patterns, 1965-1970. *Working paper. Analysis of referral trends, and service projection.*

Pre-Vocational Training for High TMR-Low EMR. *Paper presented to 1970 Conference of American Association on Mental Deficiency. Describes CSRC program.*

Rehabilitation: Manpower Technique of Last Resort. *Paper presented to 1968 conference of National Rehabilitation Association.*

The School-Rehabilitation Counselor and the Adolescent Retardate. *Three papers (administration, case management, and curriculum) presented to 1969 conference of the American Personnel and Guidance Association.*

Vocational Evaluation in the Public Schools. *Reprint. Relates technology of vocational evaluation to public schools and illustrates with the several different patterns of school-rehabilitation practice in Minnesota.*

STAFF PERSONNEL
employed during the course of RD-1810

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Neil Christenson (E)
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E = ERDC staff participating in project
C = consultant
A = college student aide
S = CSRC student employee
I = intern rehabilitation counselor
T = summer transportation training aide
F = foreign exchange professional
Regular CSRC employees are not initialed